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GREENLAND LIES NORTH

ILLUSTRATIONS BY PHYLLIS WESLEY

NEW YORK
THE MACMILLAN COMPANY
1940

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First Printing

TO WILLIAM HERBERT HOBBS GOOD FRIEND AND GREAT TEACHER

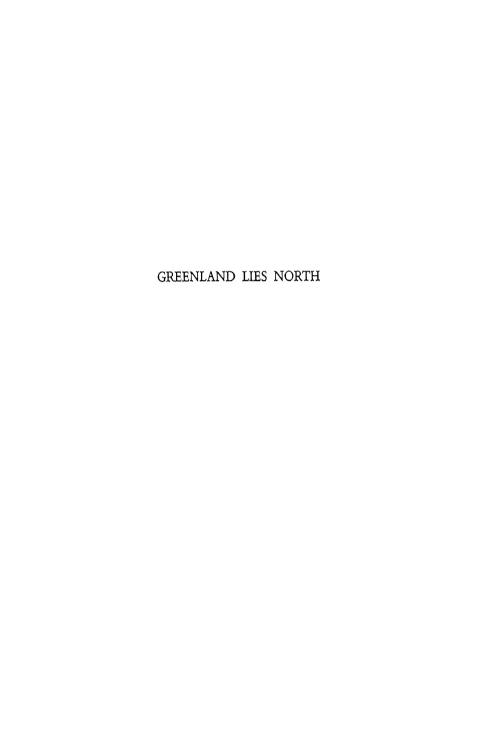


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Chapter 1

VOYAGERS

JULY 31st, our last day in civilization. Weather clear and cool. For the first time since the *Beothic* anchored in North Sydney harbor to take on supplies, her squat soot-caked smokestack belches forth smoke, which drifts away rapidly landward, a brown stain against the blue of the sky.

Within a few hours we start with the *Beothic* on her annual voyage to Arctic waters. Our expedition is on its way to establish a new station near Upernivik for the study of northland winter air currents. Having spent a year in Greenland, I survey the scene calmly. The rest of the expedition is beside itself with repressed excitement; he is Max Demorest, a University of Michigan undergraduate, for whom all this is a novel experience not quite to be believed. He stares incredulously around the decks, where a whole barnyard of domestic animals is scrambled promiscuously with hatch covers, winches, barrels, lumber, an assortment of boxes, ten Canadian Royal Mounties in scarlet full-dress uniforms, a student of Eskimo pathology, two artists engaged by the government, an explorer-botanist, and his small granddaughter—not to mention the little vessel's harassed crew which labors between despair and heroism in making ready for the North Atlantic.

It is a heady setting for our start. When at last the bow dips gently under us, then thrustingly into the incoming swells as we point out to sea, I breathe deep of the stinging air. I tell myself it is pure satisfaction that I feel, but my thoughts are confused. Six months have flown by in the excitement and haste of preparation, and now, for the first time, I have a chance to think; indeed, must think. New York nine hundred miles away. The shores of Nova

Scotia, ebbing behind us, in a few weeks more to be two thousand miles distant. Then, Max and I alone on the edge of the Greenland icecap.

I think of the stores of food and lumber in the hold, of the clothing, the scientific instruments, the other equipment prepared for us, and weigh them against a winter on the edge of the icecap. . . .

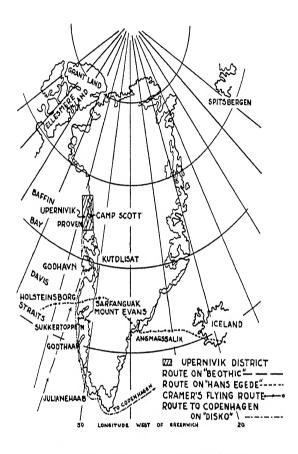
"Dreaming of that cozy station beside the Ice Box?"

This question, accompanied by a jovial thump on the back, jerked me up and cut short my daydreams. I grinned rather sheepishly at Inspector Joy of the Mounties, and began pacing the decks with him.

Inspector Joy and his troop were to prove excellent companions, which was fortunate, as Max and I shared their quarters on the after deck. These men were replacing others whose two years of solitude in outposts on lonely Baffin and Ellesmere islands were at an end. Max and I never ceased to marvel at—and secretly envy—the unemotional manner in which they looked forward to their vigils. If ever there was a group of unsung heroes, these casual Mounties must be among the most laconic! Not that they were silent as to the hardships of the North. We heard many lurid tales, most of which probably were true, for it was only when they came to refer to their own experiences that their speech dried up.

We never did learn very much about the Inspector's own thirteen-hundred-mile sledge journey, one of the longest on record. What a feat it was can be guessed by one episode. Joy and his companion had just completed a temporary snow house, and had gone into it, leaving their firearms outside, when a bear caved the roof in on top of them, increasing their number to that of the proverbial "crowd"! Through quick thinking and quicker action, the visitor was diverted, the weapons reached, and an end put to the "incident."

Presently we all retired to a sort of spare pilot house built for us



Greenland showing location of Upernivik District

on the after deck. The *Beothic* had been constructed by the United States Government during the World War—one of the old "one-hundred-day" boats—and her sleeping quarters were limited; hence the addition of the Chateau-on-the-After-Deck, or Rampasture as it was known in our lighter moments. Admission was by a password not to be repeated here. The interior proved stark but crowded. Four all-purpose tables, on which boots and belts were being polished much of the time, occupied most of the floor-space. The walls were lined by an even dozen double-decker bunks. Baggage was put under the bunks.

In the cramped space there was remarkably little confusion, though much noise. When that died down a little, lots were drawn for bunks—I secured a lower, with Max over me. Then, in almost perfect unison, off came twelve pairs of shoes, twelve pairs of trousers, twelve shirts; and, race as I might, the Mounties had all turned in before me!

I stretched out arms and legs, blissfully tired. This was the life! The dip and sway of my berth lulled tense nerves while it stimulated imagination pleasantly. Above the mild hiss and slap of waves outside the open port there came to my ears an argument between two of the Mounties as to the relative advantages of snow rub and warm-water rub for relieving frostbite. I was still undecided whether cold or warm friction was to have the better of it, when the solid comfort of my berth lulled me to sleep.

The next morning I awoke to a hubbub of voices in a foreign tongue. For a moment I could not imagine to what land or situations I had been transported. Then my sleepy eyes took in the bare woodwork of walls and tiered bunks, and saw the French-speaking Mounties in all stages of dress, some already polishing their apparel, others, like Max and myself, still yawning rebelliously; I felt the motion of the ship under me, and I realized that I was on the way to my wintry station beside the great Greenland icecap. With a shiver, I arose.

A dash of cold water on the face gave me the energy for a brisk walk around deck. Then I was ready for breakfast.

The Mounties by that time had had their breakfast, and Captain Falk of the *Beothic* and Inspector Joy alone awaited me at the long table for fifteen. This was the regular arrangement for meals. While stewed fruit, pancakes, and coffee were disappearing, I spent a pleasant hour listening to the Captain and Inspector Joy. The latter, I found, was a "brother under the parka skins," for he had had his share of the same ferocious foehn wind that had rendered my previous Arctic stay so memorable. The blow, he told me, had shot pebbles through window panes at such speed as to cut clean bullet holes! Joy had an inexhaustible fund of such North Country lore. Nor were Captain Falk's sea experiences less interesting. However, what impressed me most about him was that he did not accept a single hot dish from the steward. This in a man accustomed to voyaging in Arctic waters!

When Captain Falk became aware of my curiosity, he admitted that it was a rule with him never to eat any but cool dishes. Woe to the careless doughboy who so much as served a cup of hot coffee! It was resented as an attempt to poison him, for, reasoned the worthy salt, individuals who eat meals hot become "wormy"—he had once been, himself! For years he had suffered, and the best medical aid in North Sydney had been helpless to relieve him. Succor came finally in the form of advice from a retired midwife, who pointed out that worms were conquering him before the end of his allotted span, and explained the reason why. The Captain never erred again. He warned us gravely to follow his example, and seemed grieved when we did no more than promise to think the matter over.

That day, and the next also, the weather remained fine. The Beothic passed the narrow Straits of Belle isle, with towering cliffs on either hand, left Cape Baird behind, and continued "down North" along the 55th meridian. The rugged coast of Labrador,

our almost constant companion, we saw for the last time. The open sea surrounded us. We should not see land again until Greenland was reached.

The fourth day it began to blow. When we came up the companionway it was necessary to grasp the rail. A choppy sea flecked with whitecaps greeted our eyes, and even as we watched the waves grew and the rolling of the ship increased to distressing proportions. The full strength of the storm descended on us. At intervals, heavy waves crashed over the side to thunder against the battened-down hatches. Every lurching dip flushed the after well scuppers with a torrent of racing, foaming water, and the livestock marooned aft cried out hysterically, like a chorus.

Captain Falk could scarcely be induced to leave the bridge. He gave orders for all passengers to stay below, where the close confinement added to our discomfort of mind and body. It was like being jolted along a mountain road in a wagon-borne shut coffin. For the first time our ravenous sea appetites were affected, and the evening cocoa and sandwiches ignored. We came to avoid looking at one another. Dr. Porsild, the explorer-botanist, alone remained unmoved, lecturing away calmly on the history, political organization, and economic problems of Greenland to a wincing, evershrinking audience.

That night our sleep was broken. I recall dreaming fitfully of being swung round faster and faster in the swaying, dipping seat of a Ferris wheel, Dr. Porsild at the controls adamant against my pleas for mercy; and between times, in a dreamy stupor, I longed for the approach of daylight.

But dawn brought no comfort. The storm was battering us with heightened violence. Racks were put on the messroom table, and we sought with weary hands and elbows to hold down as many dishes as possible, unsuccessfully. No one cared. Max confided afterward that he was glad to see his coffee spurt across the cloth and his eggs slither after it. It was an excuse not to eat. As for me,

the little food I managed to down seemed to follow with embarrassing sympathy the antics of the food on the table.

The entire well deck was now awash. As the *Beothic* wallowed in the ponderous seas, tons of water were sent swirling through winches and loading booms to crash with stunning violence against the opposite rail. To maintain footing was next to impossible. The water that filled the well deck swished back and forth as though the *Beothic* were a cocktail shaker in the hands of some indolent Gargantua.

Instead of climbing monkeylike over hatches as did everyone else, Max Demorest elected to go aft along the well deck itself! Maybe Max had been roused to fighting mood by the "roughing" of the sea. We shouted warnings when we saw what he was about, but it was too late to be of use, too late even for him to turn. He could only go on. We looked at that churning water, and we looked at Max, cautiously progressing. I felt suffocated, as though I were lying under the water where Max might soon be. But all was going well; he had timed his attempt perfectly. He was no more than ten feet from reaching the quarter deck when the rail went under.

Where he had stood beside the rail an enormous wave greened against the ship. We could see nothing but water, and the tops of the loading gear, meeting each other at an acute angle. Then, after moments of sick agony, the *Beothic* heaved over painfully under us, the watery mountain leveled off the deck, and a thoroughly, chastened Max rose into view, choking for air, and clutching desperately at a coil of rope.

No word was spoken when we hauled him up the after-deck stairs.

Next, one of the pigs marooned on the after hatch took it into his fat head to break loose from his crate and enjoy a plunge into the swirling lake of the well deck. Shocking squeals of terror rent the air and tore at our ears. It was almost more sickening than the suspense of Max's immersion. I looked at him. He looked away. Then Margots of the Mounties went out to Get His Pig, crawling from quarter deck to after hatch and from there to a stalwart winch, waiting for the swimmer to be washed his way. Luck was with the pig. But not for long. The seagoing Mounty had just grabbed him and started cautiously for safety when another wave plucked the slippery burden from under his arm. Mounties are hard to discourage, however. A second time Margots found the porker within reach, and this time, with a tochold on the starboard stern side, he splashed his way successfully back to the crate.

"Worth his weight in gold here," he beamed, smacking his lips, as he returned to his bunk to change.

There followed a hot argument as to whether the pig ought to be rolled over a barrel to get the water out. The argument came to an end only when someone asked how you could roll one barrel over another.

The third morning of the storm still saw heavy seas running, yet the worst was over. Max reappeared on deck and perched himself on the foc's'le head. He had been there about an hour when he shouted, in chorus with the lookout, "Iceberg ahead!"

We all rushed to the bow. There, several miles away, but looking much nearer in the crystal-pure atmosphere, and glaring in the morning sun as though illumined from within, a block of ice the size of an apartment house rose like a frosted volcanic isle in our path. Already the quartermaster had given the *Beothic* the wheel, veering her so that we would pass to port of the berg.

"Looks like it's from the Antarctic," muttered Max, puzzled by the regular shape. Arctic bergs are seldom tabular, though certain Greenland glaciers send off ice as cubistic as any to be found off Antarctica.

As we passed wide to avoid treacherous submerged shelves, the sides of the berg rose sheer and smooth and white from the surface of the pale green water to the height of the *Beothic*'s smokestack.

This was an exceptionally large mass to be encountered so far south at that season, but we were soon to see many more, and during the spring thaw behold them breaking off from the parent glacier to sidle away south on a journey that was to end, perhaps, at the Gulf Stream—if the United States Coast Patrol did not first dynamite them for fear of injury to transatlantic shipping.

It was now August 6th. Since our departure from North Sydney harbor the thermometer had been dropping steadily. We had progressed in a few days from the scorching pavements of New York to a region where a heat wave meant an early afternoon temperature of 45° Fahrenheit, and where keeping a fire lighted in the main cabin was a necessity. From noon on, glimpses of the Greenland coast showed through the thick curtains of fog. It was very quiet. Jagged peaks, occasional half-guessed-at cones of snow, and great rocky headlands unrolled against a dull sky like a moving stage panorama unaccompanied by sound. Presently the wind, too, died down, leaving the sea calm save for the slow ground swells. I think we all felt that we had entered a different world. Max lost much of his exuberance, and I stared away ahead wondering what pale Greenland had in store for us.

The distant passage of a ship during the afternoon was a welcome distraction from our funereal progress. The omniscient Dr. Porsild declared it a 10,000-tonner—probably the Arctic Prince or the Arctic Queen—large vessels used to supply trawlers working along the Greenland coast with coal, fresh water, even doctors and operating facilities. At one time we counted no fewer than fourteen of the dependent power trawlers. Sailing vessels are seldom seen now on the fishing banks, as they are less reliable.

The waters into which we were moving were full of icebergs and growlers, and the *Beothic* proceeded cautiously through the fog, sounding the boat's whistle three and four times an hour to determine by echo the location of the most formidable bergs. From time to time there would be dull thuds and scraping as

floating ice bumped along the iron-plated sides of our little ship. These noises worked on us strangely. The melancholy whistling, the thud and grind of ice alongside, only emphasized the enveloping silence, and combined with the chill vapors in the air and our sense of nearing the hardships and solitude of our northern post to depress us beyond our powers of concealment. Perhaps we should have felt it less if we had not been compelled to remain inactive. But there was little to do beyond futile rechecking of stores, and I, for one, was glad when night came and offered the refuge of sleep.

Our last evening aboard was welcomed as the end of "a trial." It signaled the departure next morning of Dr. Porsild and his granddaughter, also, and marked as well the birthday of James Richards, assistant to the director of the Beothic's expedition. It was Jim's first birthday north of the Arctic Circle, and a celebration was called for. After much mysterious preparation the steward admitted us to the main cabin. There on the center table stood an elaborate birthday cake, suitably inscribed, and flanked with bowls of fruit punch laced with whisky! An excited murmur of laughter and jokes broke out, as we hastened to forget our constraint. Toasts were drunk, amidst cheers, to the guest of honor, and in turn to every passenger about to leave ship. Dr. Porsild replied fittingly, and Max and I attempted to follow suit. Then followed a variety of entertainment. An amateur magician among our number amused us with successful sleight-of-hand tricks, and still more with others that we saw through without much difficulty. Jim Richards furnished us with the last edition of his typewritten daily newspaper—one of the high lights of our trip—and as his items went the round of our company, roars of laughter were leveled at the amused but helpless victims of his witticisms. When the excitement died down, the remainder of the evening was spent in "yarning" before the fire. As usual, grisly tales predominated. One particularly choice narrative was told of a Mounty who took his young wife north with him. In that lonely

situation she became very fond of the sled dogs, feeding and petting them daily until she became a favorite with them. She continued that until she slipped and fell one day and was chewed to death.

In the morning a strong westerly wind lifted the fog curtain, revealing the Greenland scene in all its severity. The great central ice plateau was a gray glitter in the distance. Nearer were ranges of mountains, less high than those in the interior, and merging in turn with the narrow strip of comparative flatland along the coast, whereon dun-colored Eskimo settlements were sparsely scattered. Existence for these people is impossible in the bleak interior. The Eskimos' way of life depends upon maintaining contact with the sea, which for them is highway, and food reservoir, and general supply house. The shore line itself was rugged with rocky islets, low islands, steep-walled fjords and bold, jutting cliffs. Suddenly the *Beothic* seemed the very essence of civilized luxury.

Despite the striking appearance of the coast, my eyes turned always and unconsciously toward the interior, where the immense flattened dome of eternal ice mountain-thick dominates the whole island which is Greenland. That icy interior is one of the most intensely cold regions in the northern hemisphere. It is as much colder than the North Pole as Montreal is than Miami, Florida. Air coming in contact with the ice of that desolate expanse is chilled still more, and because of the dome shape of the plateau, slides down toward the margin as does a dense volcanic cloud down the side of its parent mountain. The sliding of the frigid air is further accelerated as it nears the sharper inclines toward the sea. Sometimes explorers traveling inland meet with hurricane blizzards of this origin. Almost as dreadful as liquid fire is this lifewithering blast of frozen air and sleet hurled in torrents of 120mile-an-hour velocity. Well is Greenland named the storm center of Earth's northern half!

The camp Max and I were to pitch beside the icecap would have to be a snug one.

Chapter 2

GODHAVN

AGAINST the harsh background of the land there came into view a huddle of European buildings. The *Beothic* slowed, coasted idly, then dropped anchor opposite the coal bunkers conspicuous on the waterfront. Our voyage was over.

Kayaks began paddling out to us by ones and twos, while from Godhavn town the curious trickled down to form a puddle of humanity on the wharf, hands waving in response to our greetings. Presently a motorboat coughed hopefully. Our eyes turned toward a landing-dock where a small-boat was illumined by a glory of brass buttons, epaulets and sword hilt.

"The Governor!"

I straightened my clothes and prepared my request. The director of the *Beothic*'s expedition had offered to take us on to Upernivik instead of dropping us at Godhavn as had been originally planned, and now I had to request the formality of the Governor's consent.

Aboard he came in all his majesty and, having welcomed us, declared he had no authority to allow the change.

"But it would save us two weeks!" I protested, thunderstruck. Two weeks of Godhavn, not to mention board bills, instead of one more pleasant day on the *Beothic*, and all because in the correspondence between the American and Danish departments of state, it had been arranged that the ship *Disko* was to pick us up! "Why, the *Disko* doesn't leave *Copenhagen* for three days yet!"

But red tape is no more elastic for being north of the Arctic Circle.

Inspiration struck me. "Can't you radio Copenhagen before the Beothic sails?"

Unfortunately, no. And with a polite bow the Governor, unquestioned master of the deck, retired to his launch.

It was with ill grace that we proceeded to unload our baggage, lumber, and gear, and store the whole in a waterfront warehouse. It increased our disappointment to know that the weather was ideal for home-building. Delayed two weeks, we might have to perform that arduous task under the torrent of autumn rainssheer torture even to contemplate. No wonder that on our last return to the ship Inspector Joy took one look at us, and then herded us into a cabin to drink a few healths with him! Others joined the party to help console us. By the time the Beothic was ready to up-anchor, we understood sympathetically that the Governor's very remoteness from civilization made official correctness all the more necessary. Dear old Gov'nor! Noble soul! Then we piled into a sealskin boat already filled with Eskimos. When informed that this was an umiak—a woman's boat—Max grew indignant, almost forgetting to wave farewell when we landed.

Out of nowhere the Governor appeared to escort us to the house at which we were to be guests during our stay. The owner, Johannes Olsen, was director of a magnetic survey being conducted in that part of Greenland, a pleasant, witty scholar, master of excellent French and English. Though his wife spoke neither language, she, too, proved an amiable person. Four small children, in addition to Max and me, completed the cheerful household—cheerful, that is, after that night, for just then Max and I were sorry company. Having apologized for being such unsatisfactory guests, we went to bed with the greatest pleasure.

The next morning, refreshed by sleep, I observed with interest the construction and furnishings of the Olsen house. Built to resist the Arctic storms and painted the typical red and white of all government buildings, outwardly the house had little to commend it architecturally. Inside, however, Mrs. Olsen had managed to contrive a bit of Denmark. The furnishings were typical of a house in the old country with its curtained windows, feather bedquilts, iron-posted beds, hothouse flowers, rugs on the floor, and a china cabinet filled with Dresden porcelain. Only the scene through my bedroom windows belied the surroundings. On one side icebergs loomed in the calm blue waters of Disko Bay; on the other the imposing basalt cliffs of Disko Island reaching heavenward toward a summer sky streaked with soft, pastel colors.

I waited until nearly noon to make sure I should not disturb the Governor in bed. Then I called on him, determined to see whether some of the official red tape might not be unwound. The Governor received me in his office, decorated with the oil paintings of a former local Danish official who was an amateur artist. In the haze of good cigar smoke, His Excellency mellowed, grew cordial, gave me a map of Greenland as well as valuable advice based on his acquaintance with the Upernivik district, and even granted permission for us to sail north on the first boat to arrive from Copenhagen! I congratulated myself on my superior discernment of character the day before when restored to normalcy by the healths drunk in the Beothic's cabin. Decidedly, my visit had been a success.

I hurried briskly toward the radio station, quite a little elated by the cleverness of my maneuvers and by the crisp air. A short stay in Godhavn might not be at all a bad thing!

The radio operator disposed of my messages in short order. A jovial chap, Poulsen, insisted that I remain to take coffee with him and his agreeable wife—all Greenland Danes somehow seem fortunate in their marriages—and we were deep in exchange of reminiscences when an excited Eskimo small boy burst in. Arfangniaq! Arfangniaq! A whale had just been towed in by a government whaler, and the Eskimos were getting ready to flense it.

Poulsen hurried me out to view the spectacle. As we joined the crowd streaming down toward the sea, I was told: Sixteen species of whales known in Greenland waters. Hurry! All but three species summer visitors from the Atlantic. The whaler had once been a Danish destroyer. It makes a practice of towing its catch to the nearest sizable Eskimo colony. Hurry! Hurry! A whale means plenty for all. The Eskimos are given the meat in payment for stripping the blubber, which is sent salted to Copenhagen, manufactured into oils. Behold the whale!

People were streaming from all directions toward the shore where the seventy-five-foot whale was being dragged upon the rocks. Everyone seemed to know where to go. A group of urchins kept the yapping dogs at bay with stones; some men were pulling on tow lines; others were sharpening implements; the women were preparing for their tasks; like the crew of a circus, everyone knew his job and the time to do it. Finally, when the great beast's tail was high on the rocks and only its huge head lay in the water, a half-dozen butchers climbed upon the corrugated back to start the flensing operations. With razor-sharp spears they went about their work with the zeal, dispatch, and care of a great surgeon. The freely flowing blood was carried off by a bucket parade to be cooked, and the surplus was slowly turning the water crimson. The expert dissection progressed from the tail toward the head. The blubber was cut into squares with slits for grappling hooks with which the chunks were dragged up the rocks to long wooden tables that had been set up. Here the women were busy salting the blubber and packing it into barrels.

Where the blubber had been removed others were cutting off the red meat and stacking it on the rocks. Little boys who were not busy with dogs scurried under the feet of their elders and with pocketknives sliced chunks of raw meat. Everyone seemed to enjoy the carnage; everyone was smeared with blood; and everyone was busy chewing the red meat and delicious matak (hide). We could no longer restrain ourselves; the mass psychology of the crowd overcame us, and soon we had changed from interested spectators to enthusiastic participants. The meat was tough, but the *matak* was palatable. It tastes like peanuts and chews like rubber—a delicacy for a king! When filled beyond endurance, Max and I left the hilarious festival for a near-by hilltop where we stretched out to doze in the warm sun. Thus ended our first whale party!

The third morning of our stay, a messenger arrived with an invitation for me to call on Dr. Porsild, our scholarly shipmate of the *Beothic* voyage. I hastened to accept. Having knocked at the door of the Arctic station, a huge rambling structure a quarter of a mile from the colony, I was greeted by a native servant who ushered me into the vestibule. Dr. Porsild appeared almost immediately. After the usual formalities, and mutual questions as to plans, he showed me through the Arctic station.

"This," said Dr. Porsild, "is my library."

I stared about the twenty-five-by-forty-foot room, lined like a modern library with stacks of books of all descriptions. "It must be the largest one in Greenland!"

He smiled, and told me to browse around. I did so with increasing wonder as I came across books on exploration in Danish, English, German, French, Swedish, and Norwegian. There could be few works on matters Arctic or Antarctic not represented there in that remote Godhavn library. The collection seemed all the more remarkable because Dr. Porsild was so much of the time isolated from the rest of the world. Gratefully I accepted his offer to use the library as much as I desired, and came away at last laden with invaluable books and pamphlets, including a survey of the district where Max and I were to winter when we left civilization behind.

Godhavn is the most important settlement in North Greenland. A monthly newspaper in the native tongue, Greenland's only newspaper, is printed there, and in addition to Dr. Porsild's Arctic station there are Olsen's magnetic station, a stone archives building, a wireless station, numerous other official buildings—one might almost include in this category the great coal bunkers on the waterfront—hundreds of houses and Eskimo sod huts, and a long, low church which was Max's particular joy. Rows of metal cuspidors, one strategically placed beneath the pulpit itself, were, I hesitate to say, the attraction. Greenlanders are among the most inveterate of tobacco users.

The chief entertainment in Godhavn was tea and coffee drinking. My experience with radio operator Poulsen was but a hint as to what was to come. Wherever we went, alone or in company. Max and I were offered tea, tea, tea, or coffee and more coffee, the hospitable Godhavners never tiring of the hot drinks which are so vital a luxury in the Northland. Tea and coffee might well be termed the local medium of social exchange, relieving the monotony of routine existence. Of course, "society" is quite haphazard. For instance, the Olsens, Max, and I decided to "drop in" on His Excellency, the Governor. We marched into the hall, took off hats and coats, and delegated someone to tap on the livingroom door. No answer. The correct thing now was to search for the missing owner. We found him in his garden, where proudly he displayed hotbeds, modern chicken coops, and radishes, turnips, and lettuce of a very good size for Greenland. I felt a little confused at the discrepancy between this shirt-sleeve informality and the Governor's extreme official dignity. However, I was able to console myself with the feast the Governor's lady created impromptu, with wine added to the more customary beverages.

The morning after I visited Dr. Porsild there was much excitement among Danes and Eskimos alike. A second whale was being towed ashore, and as though that were not cause enough for celebration there steamed into the harbor, shortly after, a gray yacht of a cruiser! The Ville d'Ys of the French navy. The graceful ship from the romantic-sounding South brought to mind thoughts of

another world, contrasting strangely with our present bleak surroundings. What could the vessel be doing here? Already I experienced the exaggerated curiosity of the colonial.

Presently the captain came ashore officially dressed in tricornered Napoleon hat, epaulets and buttons, long coat and sword, to pay his respects to the Governor. Max and I could not tell which exotic-looking dignitary enjoyed the ceremony the more. Provoking as the scene was to midwestern risibilities, we could see that these men represented their countries in all earnestness, making it a point of honor not to lessen formalities established under such different circumstances.

When the captain withdrew with the Governor I approached the crew of his gig. It was a pleasant surprise to find my doubtful French readily understood. Warmed by success, I concealed my astonishment and sat down to ask questions.

What was the Ville d'Ys doing here? The contre-maître thrust his pipe stem at the waterfront coal bunkers. "We clean furnaces, we refuel," he drawled.

"But why Greenland? Or is that a naval secret?"

The sailors smiled at one another. One fellow of Mediterranean swarthiness replied, "It is a secret, but we will let you in on it, m'sieur. The Ville d'Ys looks after the many French trawlers on the Greenland fishing banks."

Despite my hesitant French I learned that the crew numbered one hundred and twenty-five, that they had been in Greenland water all summer, and that they were soon leaving for Halifax. Members of the crew came from all parts of France, the contremaître from Bordeaux.

"And you, m'sieur," asked the contre-maître, "where are you from? New York?"

I shook my head.

"Ah, Boss-tone, then."

"No, not Boston either. I'm from Detroit." He looked blank.

"Detroit is a city east of Chicago." When he still showed no sign of recognition, I asked in desperation what American cities he had heard of before.

"Oh," said he, relieved, "Montreal."

I gazed around at our Eskimo audience and wondered whether they could not do better in an American geography test. Nevertheless, the gig's crew were fine intelligent fellows, and had they not been such thorough seamen, I am sure they would have heard of Automobile City.

I made the acquaintance of their captain the next morning. His round of calls had brought him to our hosts, the Olsens, and we spent a pleasant two hours in his company. This time the conversation was in English, which the captain spoke very well. Max afterwards agreed with me that the captain was the perfect example of the Frenchman met with the world over in official or military life, a gentleman devoted to his country and to his profession. Not even Max's insistence in asking about a mystery ship reputedly a-building could make him less a gentleman—or less discreet. Though he would not deny the vessel's existence, he put off questions with so much skill and tact that we could learn nothing.

Coaling the Ville d'Ys held the spotlight until the arrival of still another whale. This was a profitable, busy week for the Greenlanders, and a happy one for the dogs. Max and I contented ourselves with taking snapshots of everything and with awaiting the dance to be held that night, at which Danes, sailors, and Eskimos would be present. Eskimo girls in their fanciest anoraks (shirt-blouses) and Sunday-best kamiks (skin boots) kept passing our home for hours before the festivities began. It was the Grand Ball for those north of the Arctic Circle.

The carpenter shop in which the ball was held was jammed early with all the villagers. Only a small space, no larger than a modern night-club floor, was left for the fun makers. There were two girls to every man, and the girls without escorts crowded the

doorway, preventing extrance and exit once the dance began. Seated on a window sill in the far end of the room was an especially clever member of the group playing a wheezy accordion. The music he urged out of the concertina had the sameness of the tone reels of the Scottish whalers. Several times the concertina changed hands—sometimes for better, sometimes for worse—but the tune never. The sailors and native girls were prepared for anything; there were no collars to wilt and no flimsy dresses to tear. The girls wore sealskin shorts, bright-colored blouses with beautiful beaded collars over their shoulders, silk sashes, and purple skin boots topped above the knee with a black dogskin band.

From the row of girls standing along the wall I chose one and walked across the floor to her. She squealed, whether from embarrassment or from delight I have never known; but we whirled across the floor. Four steps forward, four steps back; whirl, whirl, whirl!

We danced until my feet blistered and my shirt was wringingwet. The interior of the cramped building with its narrow door and sealed windows became a steamy mist. Then at last the dance came to an end, and Max and I went home and to bed. But it was still light, and for a long time I lay watching the groups of sailors and girls divide into pairs. Through the open window I listened to the echoing in the hills of the laughing voices of lovers.

It was a sad day for all when the coal bunkers of the Ville d'Ys were full and the cruiser ready to sail. Godhavn gathered at the waterfront, remembering the liveliness of the amiable sailors; and even little Eskimo boys, still rehearsing the leapfrog and tag they had been taught with much gesticulation and loud French shouts, had a glum look that the exciting farewell salvo of the shore guns could not erase. The guns of the cruiser boomed in reply; and as the Ville d'Ys arcked gracefully away in the direction of the fishing banks, the rails were crowded with waving figures, many perhaps as sorry to go as we to see them leave.

Thus passed our first week in Godhavn. Tea and coffee fests, a dance, the arrival of whales and occasional ships—all the summer variety of a northern port—punctuated my study of reports on the Upernivik district and Max's exploration of the countryside. Once, characteristically, Max ventured so far that he was not able to return before the whole town was alarmed. I thought uneasily of the time when the weather would no longer be mild, but raging with blizzards; when I should have to sledge into the Devil's Thumb country; when we should have exchanged this soft communal life for a solitary station beside the Great Ice; and I hoped that Max's ignorance of fear would be chastened by that time. If not—Nature in winter Greenland is a mother that devours her own children.

One typical Godhavn day, cloudless and keen, while we were drinking coffee with Dr. Porsild and listening to Negro spirituals being played on his phonograph, there came an interruption in the form of the inevitable Eskimo small boy. A ship had come into harbor. The *Hans Egede* out of Copenhagen, three days ahead of schedule.

Too surprised to know whether that sinking feeling was excitement or nervous dread, I threw myself into the transfer of stores from warehouse to ship's hold with furious blind energy. My friends, I avoided. It was best not to think of them until safely at sea. Untroubled ease was in any case over, and now it was necessary to turn my face to the future and responsibility.

Loading finished, leave-taking could no longer be postponed. The Governor, radio operator Poulsen, Dr. Porsild, and our many other firm friends, Dane and Eskimo, came and left. As I leaned on the ship's rail and gazed nostalgically at Godhavn's familiar houses, I winced at the realization that for me also it had become "home." The Olsens, our "own" family, still lingered behind, displaying two of a litter of pups, Max and Bill by name, to be treated impartially during our long absence. Would the ship never sail:

"Favell! Favell!"

The Hans Egede gathered speed, turning back into Davis Straits from whence it had appeared. Jagged headlands began to ghost by alongside. Here and there on the rock, like tiny patches of lichen, showed human settlements; and as we turned northward around Nugssuak Peninsula snow-covered peaks and valleys loomed gigantic behind them. It commenced to drizzle.

Chapter 3

ARCTIC COAL MINE

Kutto Lisat," said Hans Ejornes, pointing ahead into the mist. Ejornes and his wife were the only other passengers aboard ship. The Swedish civil engineer had spent three years in the United States and spoke the language freely: in the few hours that Max and I had been at sea with him, he had become a sincere friend. It is often the case in sparsely peopled regions that men, having sized one another up, abandon the caution that renders friendship so slow a growth where human contacts are many, and human dependence upon a particular individual slight. Ejornes had befriended us, and we acknowledged our appreciation.

Now I sought to follow his directing arm. But I could see nothing. Cliffs and steep-walled fjords, their bays rugged with rock islands, showed intermittently through the fog with an etching's delicate faintness, but of Kutdlisat itself no sign appeared. Even when the *Hans Egede*'s six hundred tons glided close in to the cloud-bank of cliff which mocked the water-beetle smallness of our ship with its echoes, the settlement remained hidden.

"What's the town like?" demanded Max.

In her musical voice Mrs. Ejornes explained: "Kutdlisat is not Greenland. It is a mining town, a typical mining town; you have so many like it in the United States!"

Max looked blank.

Listening to the growl of drift ice scraping against the ship's plates, thinking of the more than polar cold, of the immense ice dome capping all the island save its rim, I tried to picture a Minnesota iron-ore mining town in that setting.

"There." Hans Ejornes pointed up an alluvial plain that stretched stepping-stone-wise to the base of the dimlý seen white high valley beyond: "The powerhouse—you see the smoke?"

A puff of streaky brown against the pale expanse of background. Then powerhouse and high smokestack, rows of dull gray wooden cabins, tiny in the distance, electric power lines, the two-storied houses of engineer and his assistant standing aloof, hills of coal dark beside a cleft embankment, rails leading down to a tramway overhanging the water's edge, under which lighters could be freighted—all these bore evidence of an American mining town transplanted, or—what proved to be the case—of a town built all at once where no town had stood before.

The government, Ejornes informed us, had six or seven years ago decided to commercialize the old coal mine, previously worked in a primitive manner. An engineer and a score of Eskimo families had been imported, together with lumber, electric drills, and other modern machinery. In a short time rose Kutdlisat, a new 'lichen on the rock.'

I thought: Mongoloid Eskimos abandoning their pointed kayaks and the sea rich in fish and seals, to delve deep under ice-encrusted ground into the black, carbonized remains of florid plants that had flourished here many million years before, when Greenland was green and luxuriant with semitropical foliage. Then the ancestors of the present dwellers in a misplaced Minnesota shanty town were feeble insectivores scrambling timidly in palmlike trees halfway across the globe. . . . The picture grew too fantastic for the conscious mind to hold.

More than a little dazed by my reflections, I scarcely noted the preparations for landing.

Because Kutdlisat has no harbor, the *Hans Egede* was anchored a hundred yards from shore and coaling operations were started immediately. Big, double-ended flat-bottom lighters were loaded with coal and towed by motorboat to the ship's side, where the

coal was shoveled into wicker baskets which the Eskimos dumped by hand down chutes leading into the hold. It was a slow process. After watching awhile, Max and I went ashore on a returning lighter with lumber brought by the *Hans Egede*.

From the wharf we picked our way toward the mine through a litter of lumber, barrels of oil, packing boxes of all sizes and description, bales of clothing, and all manners of merchandise.

Close to the mine entrance stood a huddle of sod huts. These, I learned, belonged to those Eskimos who had fished and hunted in near-by waters from time immemorial, and who had fled to other regions with the encroachment of civilization.

A rumble and squeak of wheels announced the approach of tramcars from within the mine. Presently the laden cars came into view, pushed by stolid Eskimo women black with coal dust; human draft animals. I was not surprised at this, since in all Eskimo communities it is the women who labor, whether at preparing seal hides in traditional fashion, or serving as stevedores to passing ships. Our eyes followed their tireless bodies impelling the cars over uneven rails down to the water's edge, where lighters waited to be freighted.

The mine proved to be much like others of its kind: gloomy, stifling with dust and foul mine odors. Splintery boards ready to burst under the strain were used for roof supports instead of the cedar posts demanded by safety, since all lumber must be imported from remote Norwegian forests. Eskimo men, dressed in typical miners' outfits and covered from head to foot with coal dust, wielded picks and pneumatic drills, while their womenfolk loaded the cars and shunted them away.

Some of the miners had migrated to Kutdlisat from other parts of the country. Many of these were kayak hunters who had lost their skill in hunting. Not wishing to become dependent upon others, they had come to the mine for work. The natives of Kutdlisat, who were hunters and had not moved elsewhere with the opening of the mine, had lost the art of hunting, were no longer adept in their kayaks, and were absolutely dependent upon their ability to make a living shoveling coal. However, most of them still owned dogs and hunting gear, and sledging on the glaciers overlooking the mine was a popular Sunday pastime.

During the afternoon Max discovered an inflated ball in one of the government warehouses. "Hep!" he cried, forward-passing it to me.

I kicked it back. This was a pleasant diversion from our activities of recent weeks.

Moving further away, I sent him another to be scooped out of the air.

"Hep," he grunted, returning it; and with him grunted nearly a score of grimy Eskimos gathered miraculously out of nowhere! The ball whizzed by my paralyzed fingers. When I retrieved it, Max grinned and winked. Thereafter we forward-passed in silence—at least Max and I were silent, though our audience continued grunting for us.

Before long the mine director hurried up, anxious to determine why the link between coal pits and stock piles had ceased to function. For a moment he gazed staring-eyed. Then, to the great glee of the football fans, he leaped between us to confiscate the ball! Thus did the Eskimos of Kutdlisat learn about football and football referees.

That night we stayed at the Ejornes' comfortable home; and the next day, upon leaving, we received an invitation to visit them on our return the following spring. Warm hospitality on short acquaintance is typical of the country.

At sea again, we encountered the same fog that had haunted us ever since we left Godhavn. Max and I were now the sole passengers, so we sought out the officers of the *Hans Egede* to learn what we could about them. Captain Breignhoff, a short, whiskered man of sixty-five, had spent most of his years at sea, and on the

Great Lakes waterways. Although my home is only eighteen miles from Lake Superior it was from Captain Breignhoff that I learned that Whitefish Bay, because of its frequent storms, is one of the most dreaded areas on any inland sea.

General Grant had been his hero since youth, although his faith wavered when a visit to the general's tomb revealed the great man to be as stumpy in physique as himself.

Assisting Captain Breignhoff was Chief Mate Nordhoek. This modest gentleman was memorable to us because of his cosmopolitan background. Of Dutch parentage, he was born aboard an English ship passing through a German canal, and was at present employed by the Greenland division of the Danish government. He owed his position largely to his record as skipper of the Godthaab in Lauge Koch's 1929 expedition to explore the east coast of Greenland.

Second Mate Murk looked the personification of the old-time "salt." Topping his six feet of rugged sailorman was a worn, flat-peaked cap, beneath which a badly scarred nose set between large, black sideburns failed to spoil a pleasing appearance. His ancient sea jacket seemed a relic of sailing-ship days. Yet Murk was no mere navigator, for his interest in botany had led to a collection of Arctic flora highly valued by those who were students of the subject.

Toward four o'clock my eye was caught by the massive outline of Kaersorssuak (Sanderson's Hope) rising above a bank of fog, and later I could make out the peculiar hanging glacier that covered its crest like a little boy's skullcap. We were nearing Upernivik.

The sea about us was now so thick with block ice that the *Hans Egede* slackened speed until it became difficult to discern progress by watching the cloud-hung shore. Max and I leaned over the rails, staring ahead into the obscurity which shrouded our destination. My thoughts pierced the fog. I saw myself in Upernivik's

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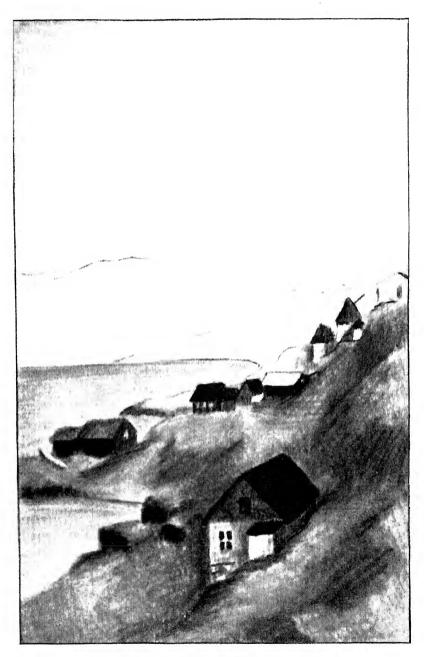
winding paths, preparing to engage the services of a native family, buy additional supplies (coal, kerosene, butter, dog feed, dogs, and skins), make arrangements for transportation into the interior, write final letters home, check our supplies and see them safely on our next mode of travel. All this must be done quickly. Further loss of time after two weeks' delay at Godhavn might be disastrous. Already the summer season was drawing to an end, and soon the chill autumn rains would merge into snow and sleet and blinding blizzards that must not catch us unprepared. Yet nothing could be done until the ship found her way through the fog to a landing.

The weather was characteristic of Upernivik. That town is one of the most northerly in the world, even closer to the pole than Norway's Hammerfest. Our winter station on the ice to the northeast would be the veritable *Ultima Thule*. Only white bears and Arctic foxes habit that desolation—white bears, Arctic foxes, and the ravenous storms which go howling out over the entire northern half of the globe.

We waited for the enshrouding fog to lift, so that it was late evening before the *Hans Egede* dropped anchor. The following morning I was up and on shore before the unloading of the cargo had begun. Hurriedly I climbed over the rocky promontory separating the ship's harbor from the town.

Upernivik straggles for a half-mile along a rocky peninsula facing the sea to the west. To the north and east it is protected from Arctic storms by a low hill, and to the south by the towering Kaersorssuak. The buildings are a huge church, a doctor's ornate residence, the manager's fine old home, the well constructed home of the priest and manager's assistant, a store, a dingy hospital, and, unique in Greenland, a dance hall built by a colony manager as a memorial of his affection for the natives.

Fortunately, I found Jensen, the manager's short, round, jolly assistant, up and about. Sympathetic toward our needs, he was



VILLAGE

greatly helpful in expediting our purchase of kerosene, coal, and butter. Upon his recommendation we decided to employ a native family and make final preparations at the small settlement of Augpilartok, twenty miles nearer the ice cap. The matter of transportation into the interior had not been settled and could not be, except by order of the manager. Tentatively we were promised the use of the Saelen, the colony's motorboat, but only after the Hans Egede was ready for the return voyage to Denmark.

As little more could be accomplished during the confusion of cargo discharge, I controlled my impatience and joined Max at the dock. He was watching the clumsy twenty-foot lighters transfer cargo from ship to shore. Boxes, barrels, and lumber were swung aboard from the Copenhagen steamer, stowed roughly, and brought to land. There, sturdy women workers carried away immense loads on their backs, on stretcherlike frames; or, if drums of oil were to be moved, they rolled the great barrels before them. The men mostly contented themselves with working the lighters and burdening the women.

That day and the next, having finished checking our supplies on shore and making final arrangements for our departure, we waited impatiently for the word to proceed with loading of the Saelen. Time dragged on our hands; we were anxious to start on the final lap. Would the weather hold out? According to the statutes the Saelen must remain in harbor until the Hans Egede was ready to sail.

The second evening we were invited to the inevitable Greenland party. "Society" consisted of all Upernivik Danes and those from two visiting Royal Danish Geodetic Survey motor cruisers, the officers of the *Hans Egede*, Max, and myself. The atmosphere was very cordial. Outside, Eskimos crowded the windows to watch us laugh and joke and consume cake, apples and oranges, several kinds of candy, coffee, wine, schnapps, three varieties of French liqueurs, whisky and soda. Max, pragmatic, tried everything. Coming away, we were presented with four bottles of schnapps to

be emptied January first in honor of Dr. Knud Rasmussen, the explorer. A staggering assignment.

The next morning we carried our personal belongings aboard the Saelen, the sixty-foot motor schooner we had been tentatively promised to take us to Augpilartok. This is an Eskimo community where recruiting was to begin. As our schooner threaded its way through the ice and out of the harbor, the Hans Egede gave us a last favell with three long blasts of her whistle. We waved back, but uncertainly, for the ship was soon lost to sight from our low position in the fog, and our attention was occupied by the Saelen's whims and the constant threat of the ice which nudged and shocked from time to time. Low above the water, it was very damp and still. We felt as though we were hemmed in by the silence and the fog.

In about two hours run the boat swung hard over and pointed inshore, then coasted to anchor. From dun-colored skin shelters and sod huts Eskimos thronged down to greet us. I was favorably impressed with the appearance of these men, with their erect postures and their well kept clothing. Only the native trader stood apart, sullen and watchful. A harsh, unscrupulous bargainer, this Dahl resented contact with any who might hold him to account, and but grunted in reply to our skipper's greeting. I was told that often Dahl knew no Danish at all. Fortunately he was in a linguistic mood today, and consented to render into Eskimo the skipper's interpretation of our English.

This determined, we proceeded up to the settlement, followed by as many of the curious as could tear themselves from the spectacle of the Saelen's unloading. Dahl's "store" was to be used for recruiting. It was the largest of the score of sod huts and official buildings, measuring about twenty by forty feet. Max gazed about him with a rather incredulous air. He was more used to Detroit and Chicago department stores than to an Eskimo trading station, and did not know quite what to make of the barrels of rice, raisins,

and hard sugar and the bits of colored cloth on the shelves. Shaking his head, he seated himself on a barrel, and the process of interviewing Eskimos began.

A suspicious-looking fellow would come before us, shy in his oily cotton jacket and worn sealskin trousers, and the conversation would proceed somewhat as follows: First, our question in English, then Skipper Saugmann's Danish version of it, and finally Dahl's Eskimo translation. The reactions of the man interviewed would then travel the reverse order: From Eskimo, to Danish, to English.

It was a little like telephoning Timbuctoo from New York, and seeing the operators of all intermediate nationalities "plugging in" until a reply came back over the circuit, while you wondered at the miracle of it. Once the message started speeding in the direction of my target, I had nothing to do but sit back and wait. Presently, like an alpha particle shot from an atom gun, the message jarred an answer from the villager.

Finally we engaged one Andreus Petersen and family as our helpers. "Andy" was a sturdy Eskimo, about five feet four inches tall, with an expression of a man who always sees the bright side of life. He would not deny the justice of his reputation as the best sledger, the best kayaker, and the best hunter in the settlement; and informed us as well that he was local representative in the native commune meeting regularly at Upernivik to decide local civic policies. The "gentleman from Augpilartok" was to receive 578 kroner—about \$150—for these items:

The services of himself as expert hunter, kayaker, and sledger.

The services of his wife Ewa, a seamstress of note.

The services of his aged mother Betsy.

The services of his seventeen-year-old son Axel.

The services of his fourteen-year-old daughter Susan.

The use of the men's two kayaks.

The use of the men's two dog sleds.

The use of the dory of Andreus' own construction.

The services of fourteen sled dogs, which he must feed together with the rest of his family, since the 578 kroner included "extras" for that purpose.

As he translated the details of the agreement, our skipper looked grave. It was no business of his, of course, but we were over-paying—

You see, it was only for the winter's duration that we were engaging this help.

The Saelen put out promptly for Pröven when our business was completed. It was the wish of the Upernivik Bestyrer (manager) that we visit this community also, although we should have preferred returning without further loss of time. I fretted constantly. Were we never to get started? At Godhavn I had been shocked at the prospect of not continuing on to Upernivik in the Beothic; but that was long since, and the end was not yet in sight.

My emotions were far from amiable as we neared the small harbor beyond which the village of Pröven blended into a background of reddish rock. Presently the red and white paint that proclaims an official building became visible; then the settlement flagpole, and the three pup-size salute guns, white-muzzled black barrels set on toy red wheels. To me all the gay red was the maddening color of official tape.

"Hi, Bill!"

Someone was shouting my name from the landing dock. Astonished, I looked at the waving figure. Nicolaisen, whom I had known at Holsteinsborg!

Nick, it seemed, was stationed there for the winter with his wife. She was a Pennsylvania girl who had come north three years before as companion to the wife of a Greenland official, and had Americanized Nick by a tour through the States during his leave of absence.

The warmth of their welcome, their baby daughter, Mona Lisa (whose smile was naughtier than her namesake's), and the luxury of conversation in slangy American, reconciled me a little to the procrastinations of officialdom. As for Max, he exploited the Nicolaisens' hospitality shamelessly. Tea in bed! Were these the rigors of life north of the Arctic Circle about which I had cautioned him? If so, he could endure them with the best!

My own enjoyment was tempered by gnawing anxiety. August 25th, fifteen days behind schedule, not one aërological balloon yet sent up, not even a decision made as to our station's location. Always in the back of my mind there loomed a picture of our being caught by the impending rains: building under torrents of chill water, our parkas and undershirts drenched, our hands clumsy with cold and wet, footing treacherous, supplies ruined, no chance to become warm, to sleep dry, until the impossible task was completed.

The hooting of a ship's horn announced the visit of the Hans Egede returning to Denmark. The evening was blind with fog. For hours I helped Nick load and fire the salute guns to guide the incoming vessel, until my head ached with the explosions and the ship's continual dreary echo-soundings. Not until one o'clock in the morning had the Hans Egede passed through the shoals—despite the gloom, rocks were several times seen under the very hull—and into the channel. At three o'clock I dropped on my bed and slept.

Cargo discharge was completed by noon the next day. Still the ship did not leave. Had something gone wrong? No, the steamer merely awaited the arrival of the Bestyrer's motorboat from Upernivik with some last-minute letters he wished posted.

"Imaka," say the Eskimos, and Greenland Danes have adopted the word. "Perhaps." A philosophy, imaka, a contempt for time's mastery akin to the mañana of Latin America; but to Max and myself, agonizing. For in the morning we were to get under way —imaka.

Chapter 4

TO WORK!

IT looks like a manure pile," said Max.

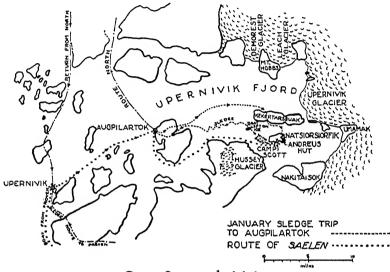
I scoffed. "Your esthetic sense is dull; this is good functional architecture, therefore beautiful to an unprejudiced eye."

We gazed at the black and strawlike sod wall rising yard-thick about our shack, happy despite aching backs and sore hands because at last things were going right.

Luck had been with us ever since the Saelen dumped us and our stores on this stony islet of Natsiorsiorfik. It had not seemed so then, however. To find ourselves with all our possessions strewn on a hummocky rock at three-thirty on an Arctic morning was not stimulating, to say the least. Despairingly we had piled crates and boxes into three walls, thrown a tarpaulin over the top, and crawled into the hole like wounded animals.

But the next morning a perfect location for building was found not two hundred yards away. This was no small matter. The situation had to be such that it was sheltered from wind, yet exposed to the sun; near a hill suitable for balloon ascensions, but protected from snow slides; not too far from running water, and at the same time safely above the ice-thronged sea. What realtor would dare promise so much? Snug in a horseshoe of hills, the bend of which rose a hundred feet above sea level to provide a logical balloon ascension station, our dwelling site was unsheltered on only one side—providentially, the south. We should have the benefit of the departing sun to its last ray, and be ready to hail the prodigal's return in February. Moreover, all about were tumbled boulders,

some cottage-size, which would furnish additional protection from the wind. Thirty feet from our doorstep-to-be flowed a brook. No snow slide could deluge us from our collar of hills, for



Camp Scott and vicinity

they sloped gradually. And supplies would have to be transported only a few hundred feet! The weather was immaculate. What terrible setback could be in store for us?

Our justified skepticism proved groundless, and we made rapid progress, working long hours from morning to night, most of the time in a twilight haze—though dawn and sunset still were more than twelve hours apart. Construction began as soon as our Eskimos had dragged our lumber the last short distance on its journey from Nova Scotian forests to the foundation of solid rock we had selected. We laid a double floor on a floor plan nine by fourteen feet. Separating this from the rock was a blanket of balsam wool over a six-inch layer of tundra insulation. On the 30th of the month, work began on the frames.

Meanwhile Max and I continued to live in the open, cooking

over a primus stove when hunger could no longer be denied, and sleeping the sleep of the virtuously weary in our cave of boxes. Along with our work on the house we took scientific observations from the first day. Every two hours from eight in the morning until eight at night we dropped our tools to make observations. Max's induction into cloud identification had started in Ann Arbor. Now we were recording clouds as to kind, amount, and direction. From them we moved to an improvised instrument shelter for a record of temperature, and a wet-bulb reading of the thermometer for temperature of the dew point, vapor pressure, and relative humidity of the atmosphere. Air pressure was recorded on a barograph, but, to keep an eye on the instrument, we soon fell into the habit of reading it at observation time. For wind velocity we relied largely upon our abilities of observation and former experience. Precipitation was noted as to amount and kind. Having made the last observation of the day, we would return to camp and pitch into construction work until long after midnight. Then, filled with satisfaction, we crawled into our box and tarpaulin cave.

I remember that ocean waves were washing over me in my dream when I awoke. It was undersea dark. The beating of waves could still be heard. For a moment I did not know where I was. Then I felt Max stir in his sleeping bag beside me, and I realized that torrents of rain were crashing down on our sagging cloth roof. I struck a match and looked at my watch. It was three o'clock. Runnels of rain spouted out from the box walls where my head had been, and only two yards away from my head the dogs were howling their protest against the downpour. I could picture them pressing their darkened fur against the lee side of boulders in a vain attempt to find comfort. Every day after sunset their weird concert began, but now they were outdoing themselves. It was the mournful voice of the northland.

Sleep would not return despite my weariness. My shifting about

awakened Max—fortunately so, for his sleeping bag had settled into a foot of water. A cup of warm coffee would help, we decided. After much sputtering the primus finally decided to burn. Crouched in our cramped quarters, we fumbled about for a pan and cups. No fresh water! Max, already drenched, volunteered to get some. His appearance in the open brought a new chorus of complaint from the dogs. One beast, braver than the others, ventured to join me but was hurriedly induced to change its mind.

After what seemed hours we had the coffee boiling comfortably. As we finally prepared to settle down, another interruption—Andreus! The commotion or the smell of coffee (I think the latter) had awakened him. There was no room under the tarpaulin, so we passed a cup of coffee out to him. So happy was he about it that his whole family awakened to help adjust our sleeping quarters for greater comfort. Presently we were again ready to roll in. This time, Max, whose bag and clothes were soaked, stripped to join me in my bag. Thus we spent the night.

At eleven there were a few signs of clearing, but our hopes were soon drenched. Nevertheless, work went on. Between the heavier showers I put the anemoscope into operation, and anchored the theodolite on the hilltop, bracing its tripod with heavy stones to withstand the furious blasts from the icecap across the bay. Even in the rain that vast, unmelting dome of ice and snow, which promises to outlast mankind, as predicted in northland myths, loomed formidable and somehow sublime. It seemed a giant of primal antiquity, brooding patient in exile until time ripened for it to descend again upon our ephemeral human world. In Greenland it is still the ice age.

My task completed, I rejoined Max. Seeking to keep out the persistent rain, he had tacked strips of tarpaper over the roof, but through the unfinished windows and door drizzle still spattered in. The interior was dry by comparison with our sea cave, however,

and we began the transfer of valuable supplies, together with our sleeping bags. A floor underneath, a roof overhead. What luxury! Beginning with that first night indoors, this isle of Natsiorsiorfik spelled home.

Next morning the rain and mist were gone. Overhead the sky showed brilliant with stars, for the sun was not to rise until six o'clock, and we set to work with renewed energy, hoping to finish our task before the advent of cold weather. We succeeded in tarpapering the entire outer shell of our double-walled house. In the rays of the rising sun the steel discs used to prevent nails from tearing the paper glinted splendidly against the dark background. Nothing but the promise of our initial balloon ascension could have torn Max away from his task.

Our aërological program was really the primary objective of the expedition. Next to observations of clouds, the pilot balloon is the least expensive and simplest method of sounding the upper atmosphere; hence, we were equipped to make a large number of ascensions—we had more than two hundred assorted red, white, and blue balloons and forty kilograms of calcium hydride.

Filling the balloon requires some delicate handling. The balance indicating balloon lift as it filled with hydrogen is managed with extreme care. The flight of the balloon from the hilltop is followed through the theodolite. At fifty-five seconds a buzzing warning signal comes from a timing device. Every minute at another signal the exact position of the balloon is determined and recorded. Then comes the final computation derived from the theodolite readings with the help of a plotting board in our hut. The aërological records were all made and computed along the approved lines of the United States Weather Bureau.

We took time off only to snatch a few mouthfuls of cold beans, pilot bread, and fruit. On the occasions when we had attempted to cook a formal meal in the open, half our energies were required to keep off the Eskimo dogs. They were intensely curious as well

as permanently hungry. Nothing was safe from their raids, not even objects placed supposedly out of reach on the house roof, though once they had investigated anything they did not concern themselves with it again, provided they did not consider it edible —which classification did not exclude shoes, ham coverings of tar composition, and clothing.

During the afternoon we put finishing touches to the outer walls, while our Eskimo helpers packed dried tundra between the shells for insulation. But alas for romantic isolation! Andreus and his offspring, Axel and Susan, were not our only helpers. Though our station in this wasteland was north of the world's most northerly settlement, precariously situated on the edge of an inferno of storms, to Max's intense disgust kayaks paddled over every day from Augpilartok, fifteen miles distant. "Rubberneckers!" he would murmur bitterly. This was not quite fair, since our visitors sought employment at the prevailing rate of three or four kroner a day in order to be able to buy sugar for their wives, and could not be blamed if there was not work for all.

One who found regular employment was Andreus' old crony, Matti Hansen. Matti, of course, was unrelated to most Eskimo Hansens, this being a surname comprising half the native population, four-fifths of the remainder being Olsens, with a sprinkling of Petersens, Jensens, and other Danish "-sens" for variety. Our Mr. Hansen was my personal assistant, a specialist in wielding the saw. All day long he followed me about, alert for opportunities to exercise his profession, cherishing his chosen instrument, a ripsaw that behaved very poorly on wet lumber. It would have ruined anyone else's patience to rip through a single board, but Matti sawed happily through hundreds of feet of wood, once measurements had been made for him.

Andreus, who was Max's man Friday, was scarcely less devoted to the saw. However, Andreus was no novice. The twenty-foot wooden boat he had built for himself would have done credit to any carpenter, and had it not been for his timidity in offering suggestions he would have been the perfect helper. Like the rest of his people, he lost all initiative when dealing with white men.

His wife Ewa had been making sealskin trousers for Max and me while house construction was going on. I don't know what the price of sealskin trousers may be in exclusive city shops, but including the price of the skins, ours cost us, complete, three dollars a pair.

We thought we looked very grand in these sleek garments, with bright bandanna handkerchiefs about our necks. Despite inconveniences and slack standards in regard to meals, we were fastidious about our dress and our habits, brushing our teeth regularly, etc., and it is odd how much simple circumstances impressed the natives. Indeed, even the chaotic pile of painted wooden boxes excited far more interest and admiration than did our cameras and complicated meteorological instruments. This indifference to what civilized men most pride themselves on seems characteristic of primitive peoples. I recall that some years ago a Koloni-bestyrer of Godhavn escorted a young Eskimo girl visiting Denmark from the Copenhagen dock to her lodging, without cliciting more than a nod in response to his pointing out buildings, crowds, automobiles, bicycles, tramcars, and trees-all of which were as utterly new to her as to a stray from another planet. Unlike their inquisitive dogs, Eskimos have little abstract curiosity. "Can use?" they ask.

September 4th the thermometer at noon registered more than fifty degrees. Sweltering in our heavy outer garments, we discarded them to work; then at once wished we had not. Hot sun and windless air had brought forth swarms of mosquitoes and buffalo gnats eager to sample imported blood. Our "family" dismissed the pests with casual waves of the hands, but Max and I were persecuted almost beyond endurance despite tobacco and frenzied semaphoring. Neither of us had thought to bring netting or repellent preparations: we were going to winter in Arctica's most frigid region! Young Axel regarded us with a show of sym-

pathy, but did I imagine that he muttered 'too much bathe'? Certainly it was Max's belief that characteristic Eskimo odors played no small part in discouraging insect enthusiasm.

Fortunately, my own work confined me to the house much of the time. I was building tables, desks, bunks, chairs, bookshelves, and equipment racks. When the stove and the remainder of our supplies were brought in, and we sat back cherishing our first hot meal in more than a week, we could survey our surroundings with justified approval. Until then I had never fully appreciated Walden's charms for Thoreau. But the snugness of the dwelling wrought with our own hands, the clean boards, smells of fresh-sawed wood and tangy tarpaper, the cherry-red stove with its efficient draft, full bookshelves, supplies for belly and for work ranged round us where we could see them, made up an experience of complete, sensual satisfaction. We knew no wants. Mellowly I looked forward to my first real bath since Godhavn's chilly tubs. . . .

Chapter 5

BALLOONS, GRAVES, AND GLACIERS

THE balloon soared rapidly upward; and Max, unable to screw the vernier in order to follow the balloon, lost it from the field of vision.

"Release the vernier and point the telescope at it," I cried.

The balloon was plainly visible, but Max's actions were not quick enough; so I went to his rescue.

"I'll point the barrel while you follow it in the field."

"O.K. There it is! I have it again!"

Filling the balloon to its correct lifting power, following it through a theodolite, recording its position every minute, making all of the succeeding computations, and, in addition, performing all of the other tasks imposed by our meteorological program was no sinecure.

I prepared myself with the five-second warning buzz and made the reading at the full minute. When the ascension had been completed, the position of the instrument was again checked. Moving the theodolite and adjusting it daily in the cold winter would have been trying work; so we had anchored it and improvised a snug sailcloth covering for it.

"It's not so easy as it looks," he grinned, flinging nonexistent sweat from his forehead.

"You'll get the hang of it soon."

"I hope so."

"All right. Now let's complete the observation."

As he took the temperature, humidity, pressure, and cloud read-

ings, I thought of the time two years before, when I was the novice of the expedition, unable to send up a balloon without losing it. Max would learn. Indeed, he had to, for when I went north to study conditions in the Devil's Thumb country he would be left to make observations alone.

Training Max and making observations occupied about six hours a day, and with some leisure at last, I began to roam the island. We found that Natsiorsiorfik measures about four miles in length and, at its widest, not more than two miles across. Some slightly higher elevations were toward the west. We had a clear view, broken by one or two small islands, of the inland ice not three miles away. The only land masses of any size were far to the south and north.

My walks had no particular objective, but before long one presented itself in the form of several curious-looking mounds of rock, which might have been oversize Eskimo fox traps, except that the massive slabs and chunks were greatly worn and weather-beaten. I was at a loss to account for the formations. Neither glacial nor stream deposition could well leave such mounds, and as for erosion, that agency was out of the question. Under the stamp of my foot there issued a muffled sound—the interior must be hollow! Then the thought flashed before me that I was standing above an Eskimo grave.

I looked around, excited with my discovery, and counted ten such mounds within a stone's throw of Observatory Hill. The very rocks used for anchoring our instruments there must have been removed unawares by Axel from one of the graves. Yes, here was one whose interior was exposed, allowing me to examine it without risk of offending the Eskimos. A skull, brown, spotted with decay, was still visible; the skeleton had disappeared; whether decomposed, or carried away by foxes, it was impossible to determine.

This explained the flat slate harpoon head brought me earlier in

the week by Andreus. The graves might be rich in buried articles. If only I could explore them without our retainers' knowledge... "Puissi! Puissi!" ("Seal! Seal!") cried Axel that afternoon.

Several dark seal heads had appeared in the waters of the fjord, and at once the excited Eskimos launched their kayaks to give chase. Hurriedly Max and I left for the nearest graves.

Most of them were on high ground, overlooking the narrow fjord separating Natsiorsiorfik from the somber, glacier-worn mountains of Greenland dark in the middle distance. I do not believe any location could be more bleak. Perhaps this contributed the quality of strangeness to my emotions as we prepared to open the first burial mound.

Opening them proved no easy task. Though the graves were built above ground because of the frozen surface and the shallowness of the earth, some of the slabs were immensely heavy, and even the smaller pieces used for chinking had to be removed with care, lest the entire mass be unsettled. At last, working with crowbars and our hands, we had uncovered first one, then several.

The graves were small, rectangular. There was no fixed orientation. To save building one side, some were constructed against large boulders. Of those we opened, four contained the remains of single bodies, one a jawbone, another four bodies. The remaining mounds were empty. Presumably these had been built as cenotaphs to unreturned hunters and fishers, for their weather-beaten appearance gave evidence that they had not been tampered with. From the position of the skeletons found in the communal grave, and from the small area—two by four, by about a foot and a half in height—it seemed likely that the burials had been made in a crouching position, and at different times; else there would not have been space for all. Three of the skulls were identified as those of a man, a woman, and a child. The fourth, indistinguishable with decay, strengthened our conviction that the bodies had been interred over wide intervals.

The single graves contained skeletons laid lengthwise. One grave which particularly interested us was found near the summit of a neighboring hill. Somehow the Eskimo builders had managed to detach a slab weighing a ton or more, and to stand it on edge in front of an overhanging ledge, so that only the two ends and the outer portion of the top need be covered with smaller stones. The foundation too was of solid rock. On this, cushioned by a footdeep layer of tundra, lay a body wrapped in several thicknesses of sealskin wound tightly round with sinew. Beneath this covering patches of skin still remained intact. The skull bore most of its original crop of hair, though this was bleached moss-green by decay—a process that could not have taken less than two centuries. The owner of the moldering bones had been contemporary to Ionathan Swift, and not until his grandchildren's day could vague, distorted rumors of the American Revolution have reached this capstone of the Western Hemisphere.

The skulls were peculiar in being crested front to back like a roof. The upper temporal lines were likewise elevated, which furthered the apish appearance. However, the brain capacity was modern. Conspicuous was the narrow nasal fossa, indicative of an "aristocratic" type nose: possibly the heritage of Leif the Lucky and his followers, who maintained themselves in Greenland for several centuries before they disappeared. The teeth even of a child skull were worn down to the alveoles. Doubtless skins were rendered soft and pliable two centuries ago in the same manner as they are today.

Burial habits have changed somewhat with the coming of Danish settlers. Formerly the burial plot was any location convenient for nearness and abundance of loose stones, so that a village might have a number of "cemeteries," in proportion to its age and continued prosperity. Now government officials mark off special areas and forbid the burial of dead elsewhere. These cemeteries are usually desolate places, overlooking some grim fjord or the sea so

prominent in Eskimo life, their grayness brightened for only a month or two in summer by sparse and timid flowers. The graves of the wealthy sometimes are marked by wooden crosses.

The Greenlander, though careful of the dead, is not afraid of dying. His is the fatalism of simple peoples close to nature. What must happen, will. Nearing death, he is dressed in his best and gayest clothing, and all about him his relatives speak openly of the imminent demise. When the end has come the body is removed by a certain definite route, and an established ritual with the head lowered, the voice hushed is observed in speaking his name. Probably the devious removal was to throw the ghost "off the track," the voice was hushed to avoid attracting the ghost's attention; and, to confound evil spirits further, he was spoken of by another than his own name. Nowadays his belongings no longer become grave goods, but are kept for use by the survivors.

We had now reached our first Sunday in the completed house. To celebrate the occasion we rested, performing only necessary tasks, which included running up our Explorers Club flag. We hooked up our short-wave receiver for diversion—and learned that the winter was to be passed without radio because of defective tubes. I did not know whether to be glad or sorry. Radio is a mixed blessing. It is an exquisite pleasure to receive messages from home on the special Arctic broadcast, but—I had a vivid memory of restlessness made almost unbearable by endless dance tunes, advertising, political campaigns, and other noise.

There were ground frosts at night, now, and the morning of September 8th we found ice in the water hole. Despite the sun's brightness, which required of us no more clothes than we would have worn at Ann Arbor, we had the benefit of its direct rays only a few hours a day, and several spots that might have been new ice appeared in the fjord. Winter would soon be on us with a rush. This mild weather was but a reprieve.

September 9th, as we were making our daily balloon ascension,

our first "real" visitors surprised us. From Pröven, our friends Nicolaisen, and Dr. and Mrs. Rask, whom we had learned to like so well in Upernivik, brought the supplies we had ordered by kayak messenger. The supplies they secured from the ship Disko out of Copenhagen—the vessel that was to have transported us from Godhavn to Upernivik according to the Governor's original decree, but for which we had not waited. The previous day, the day on which our water hole first froze, the Disko had sailed for home: the last voyage of the year. That tie broken, Greenland was left marooned until the unimaginably remote return of spring.

Perhaps our visitors sensed our momentary dejection. Max and I began to glow under their praise as they admired the location we had chosen; smiled at our clothes hung out to dry—Ewa had justified her reputation as Northern Greenland's laundress, scrubwoman, coal-and-water porter par excellence; nodded approval of the sloping sod wall built yard-high and more than yard-thick about the base of our house to keep out drafts; and exchanged glances on seeing the interior. However, as our quarters were scarcely large enough for five, one of them a cook vigorously wielding his implements, I led our guests outside to talk until Max should be ready. We had not twice exhausted the news and gossip of Pröven before a hail recalled us.

Max had made good his culinary boasts. Baked ham, mashed potatoes, canned corn, and brown bread were all well prepared, and to better matters, the Rasks had presented us with beer and phonograph records. Six bottles of "Gamle Carlsberg" remained at the meal's end to swell our growing "cellar," but more welcome still was the gift of a peck of potatoes. Dr. Rask interested himself in our archaeological finds. The narrow nose skull particularly drew his attention. Though agreeing that the specimen was at least two centuries old, he pointed out that the cheekbones were elevated more than those of contemporary Eskimos, which argued puzzlingly against the admixture of white blood.

The next morning—Nick had bunked with us, the Rasks on their little sloop—we arranged a demonstration balloon ascension for our visitors. From Observatory Hill we could see the Doctor's sloop riding gently at anchor. The sun was warm: it was hard to realize that a few weeks hence it would be difficult to maintain balance on this exposed situation. The breeze now was no more than pleasant. Peacefully we listened to the hydrogen bubbling up in the metal gasometer, into the water of which lumps of calcium hydride had been dropped. The pilot balloon swelled and bulged. It became itself a bubble of rubber, thirty inches across. Soaring up into space, it climbed rapidly, 180 meters a minute.

Dr. Rask inquired, "What height do you attain, usually?"

"About 7,000 meters. We reached 14,000 once—that's nine miles, more or less." Max winked at me. "I'll see to it you get a good run today."

Sure enough the balloon did behave well for the "company," making the best run of the expedition. We followed the ascension a long while, though Mrs. Rask clearly doubted whether we were serious—the eyepiece of the theodolite pointing right at Pröven, and the barrel at right angles to the eyepiece!

Both the Rasks were inquisitive about everything, as they were new to the country. Of course they were fascinated by the great inland icecap. It could not have been otherwise, with 90 per cent of Greenland under ice, which dominates the inhabitants as it dominates the weather, and once dominated the northern hemisphere as far south as Germany in Europe, and the Ohio River in the United States. Little persuasion was needed to render them eager to accompany me on a tour of inspection of the nearest glacier.

Dr. Rask's sloop brought us in an hour to within a quarter-mile of our destination. Here the water was so laden with glacial stream-borne silt that it was impossible to see one's numbed finger an inch or two below the chill surface. To a half-shut eye our vessel sailed magically across a field of solid clay. I recalled an appropriate Eskimo description of the glacial stream near Mt. Evans. "She malted milk," observed the sophisticated Greenlander.

Sounding with a pole at intervals, we crept forward until obliged to anchor, some hundreds of yards from land. We left the crew aboard the sloop and rowed ashore in a small boat, making a landing, somewhat precariously, on slippery rock; and then stopped to look around.

Off to the left the glacial front rose five hundred feet above the fjord like an immense block of marble, the upper portion ornate with half-sculptured figures, the rough carving extending in places down to the water, whereon lay scattered chips and fragments, some shaped as though playfully or experimentally hewn in seal and other animal forms. Above the endless white frieze so much resembling British chalk cliffs, and to our right, the distant mountains of J. P. Koch Land peered dramatically dark and ominous. The air was chilled by the ice mass, and bore a smell compounded of ice vapor and the effluvia of fjord and boggy shore. This current draining off the inland ice blew steadily in our faces, stimulating us almost as much as the spectacle of the sprawling ice giant of Northland lore, that had conquered the world and would conquer again the world where men fancy themselves supreme. Thousands upon thousands of square miles of ice. A continent of rigid water, diversified by glacial lakes and streams, hills, gullies, Saharas of ice, plains, bad lands more agonized than the lunar landscape, and city-broad glacial tongues, reaching out with nightmare deliberation to lap the chalky sea, beyond which civilization hummed unsuspecting.

"Now where?" smiled Mrs. Rask, a little daunted.

I pointed to the moat separating the ice from the land of Nakitaisok. It afforded an easy approach toward the interior. In a few minutes we were slipping and stumbling up the glazed face of the glacier, now and again clutching frantically at rugged hummocks to avoid a bruising fall. The crampons on my boots made ascent fairly easy; but to the others progress was painful. Nick and I took turns half dragging, half carrying Mrs. Rask forward. Everywhere the tortured surface was pitted with holes, some pencil size and pencil-deep, some eight inches across, all treacherously crusted over, with water an inch or two below. It took us nearly two hours to advance two kilometers. Exhausted, our hands battered from contact with jagged ice, we paused to catch breath.

Ahead, the rising white slope stretched to the horizon. Ninety days journey beyond lay the east coast and Greenland Sea. One might continue around the globe at this latitude without encountering human life. Behind us, the ice we had so laboriously traversed seemed but a stone's throw across, the shore a minute's run distant. Natsiorsiorfik was a gray streak. Darkness was coming on, and we began the arduous return.

It was a very weary, very silent party that reached the sloop at dusk. Wordlessly we filed into the little cabin, attacked black bread smeared inch-thick with lard, downed some heartening schnapps, and sat listening to the rush of water alongside, which indicated that we were approaching the smoking-hot meal prepared by Max to satisfy even such hunger as ours.

Chapter 6

WAITING FOR WINTER

It is snowing. The first snow of winter. Suddenly our house in which we sit developing photographs has become a snug armor against hostile nature. Gazing at the flakes which tumble past the window, I feel the cabin a part of me, as integral a part as the tortoise's carapace, and no less necessary. Without it I should be naked in a sinister world. Only this shell stands between me and forces eager to rend my defenseless body with stabbing sharp winds, causing my vital warmth to bleed away into the hungry cold....

Yes, winter is here, though it is but the 13th of September, and the snowfall is already dwindling, and presently ceases altogether. The winds may be bearable, the air not frigid, yet autumn is over. Pictured in the window frame there is revealed a wintry gray universe, antihuman in gray sky and grayer clouds and mottled cloudform hills gray-white under the snow, all mingled indifferently as though this were the Chaos preceding the formation of the world. The light too is gray. The sun, though still visible for many hours each day, never rises more than a few degrees above the somber horizon. Shadows are long upon the ground like dreary gray ghosts. Daily they grow longer and more mournful, streaming off northward toward infinity-eternity, and soon they will not appear at all: the sun is fleeing south.

It is no wonder, I thought, that Northland literature is "gloomy."

But Max and I were too active to remain moody long. Every day at six, the alarm clock rang. In the dark we struggled out of our sleeping bags, opened them up to air, slipped on our outer clothes and boots, lit the kerosene lamp, shook down the stove and threw on coal, splashed hands and face, and awoke at last to find ourselves eating a breakfast of sea biscuits and coffee.

After breakfast there was always a multitude of small tasks to do, in the house and out. It might be necessary to split kindling, skin the tar off a leg of ham, photograph or pack specimens of flora, fetch ice from a stranded berg for melting, build additional shelves, wash clothes, record observations, repair a collapsing table, and so on.

Of course there were always the two-hourly meteorological observations to be made, seven times a day, from 8:00 A.M. to 8:00 P.M. and Max's nth lesson in observation technique. Clouds were to be recorded as to amount, kind, direction, and—if conditions permitted—as to elevation and velocity, determined by sending aloft a three-inch (uninflated measurement) balloon. Air temperature was recorded by thermometer, alternately with a wet-bulb reading, to learn dew-point temperature and the relative humidity of the atmosphere. Air pressure was read from a barograph, chiefly to check up on the proper functioning of the other instruments. Wind velocity could be approximated on the Beaufort scale. As close as possible to noon, 45th meridian time, a pilot balloon was sent up; if the weather and visibility were good, a six-inch one, red, blue, or white in color-according to visibility conditions. Necessary computations were made with the aid of slide rule, plotting board, and graph charts. Daily, weekly, monthly summaries of our observations were also obligatory. Sometimes Max's curiosity imposed additional tasks. Observatory Hill, we found, had an elevation of 135.6 feet.

Hunger now demanded that lunch follow without further delay, so one of us would stop work to serve as cook. I had had, inevitably, considerable experience, but Max was still capable of surprises, as when he presented unroasted coffee beans as a vegetable.

The meal over, I would usually write in my journal, while Max fiddled with the broken radio or read. Included among our carefully selected eighty volumes were eighteen scientific works, and various books of exploration, biography, poetry, and fiction. Natsiorsiorfik Library also boasted several score of pamphlets: scientific reprints, mathematical tables, United States Weather Bureau instruction leaflets, et cetera. Not to be overlooked were Max's prized "Seascout" Manual, and a cookbook dated 1904 whose every recipe called for wine, whisky, or brandy.

The remaining daylight hours were commonly given over to exploration and similar activities, apart from the time needed for observations. Our work would be complicated when we had a native audience. For instance, once a balloon was lost sight of to the naked eye, one chap would always offer to direct the barrel of my theodolite toward the sun, which he must have reasoned could be the only thing left for me to try looking at. Turning on the buzzer which sounded minute intervals for readings more likely than not would occasion a panic among first-time visitors. Even in our own camp difficulties arose when science attracted young Axel too strongly, and his papa had to give him a tongue lashing because the anemoscope revealed the passage of hurricane and earthquake: the record roller being wrenched right out of its socket!

About six o'clock, when the sun set, the island's irregular surface became an indescribable confusion of dark rock and sweeping shadows, all so deceptively mottled together that walking away from the beaten paths was of nightmare difficulty. Darkness did not come until an hour later.

Supper at six o'clock or thereabout was a feature of our day, and might include such delicacies as watermelon rind pickle. Eating there in the glow of the kerosene lamp, warm and safe, dusk bluing the windows, we felt very cozy, even civilized. We still found much to chat about, due equally to Max's inexperience and intense

curiosity. The remainder of the evening might be spent in reading, playing at checkers, or working on our scientific data to the accompaniment of a chorus of dogs. I insisted that we be sparing in the use of our eyes, however, well knowing the effect constant reading would have later on.

To vary our routine there were always outside diversions. Among these, ptarmigan 'hunting' played an important part. I had been authoritatively informed on the coast that the bird was absent in this district; hence it was an agreeable surprise to observe several of the Arctic grouse scratching up the ground in search of food. Doubtless they were migrating south before the ground crusted over. Ptarmigan are said to thrive on the outskirts of the icecap; I have myself seen them alight on glaciers.

Securing the birds is not much sport, either because their sight and hearing are defective, or because they are unable to learn a caution not needed in their solitary haunts. If one shoots at a flock of a score or so, three or four birds will invariably be killed, while the rest content themselves with fluttering a few yards away before settling down again. During my season with the expedition at Mt. Evans we discarded guns for stones. Even this ammunition is sufficient to provide a lone Eskimo and his dogs with meat. Indeed, native hunters disdain to catch ptarmigan, rightly considering this an exercise for women and boys and unskilled Europeans. In the Holsteinsborg region so many were sold to the Danes by "smalltime" hunters that canned ptarmigan made up a part of the supplies Max and I had brought with us. This contempt for the bird extends to the eating of it; or perhaps the partridgelike flesh is too delicate to be appreciated by one accustomed to coarse Eskimo fare; certainly to us ptarmigan is superior to any other fresh meat obtainable in Greenland.

One day Max came running in greatly excited to report the discovery of ravens "four feet wide!" These sooty scavengers, largest of the crow family, were no strangers to me, as they had been a

familiar sight on previous expeditions, picking at nonexistent food left by the dogs. On the ground the gross birds are surprisingly fast and graceful—and woe to the injured hunter lying numbed in the snow! Between the ravens and the foxes there would be left of him only a few shreds of bone. Probably the foxes must often content themselves with the leavings, for the noisy ravens are bold and quarrelsome—one I saw amuse itself for more than an hour in teasing a surly sled dog, flying off a few feet whenever the tormented animal had stalked almost within touch, the game ending only when the disgusted dog had to quit from sheer exhaustion. Ordinarily ptarmigan and smaller birds, and the dung of land animals, supply the Greenland raven's diet, but they seem quite willing to "turn a claw" to anything profitable. This is not surprising, since the Corvidae are considered the most intelligent of birds. I recall a raven caught near Mt. Evans, after many unsuccessful trials, in a steel trap. It not only worked loose the chain secured to a rock, and flew away with the trap, but kept itself "hearty" in the meantime by picking out the cork of a can of seal oil stored within reach, and drinking the contents.

Cheerful Ewa contributed to our zoological items by bringing us an embryo seal some six inches long. Max, who was at the time deep in Darwin's "Voyage of the Beagle," decided to preserve it in alcohol, along with his collection of feathers and rocks. In its open-neck bottle, the tiny seal had a rather wistful and sleepy look, though as a specimen it was decidedly professional in appearance.

On the premise that where there are Eskimo graves there should be other signs of Eskimo habitation, I spent much of my spare time wandering around in the hills. Finally I came across the ruins of nine houses. The walls stood only about a foot high, but the position of the sleeping platforms and of the approach tunnels was still clearly visible, although overgrown with grass. Houses and tunnels faced the open fjord, and none was more than 200 yards from our own house, which indicated that Max and I were not

alone in finding the site satisfactory. To judge from the piles of seal, bear, reindeer, and dog bones strewn about, our predecessors must have lived in an Eskimo Eden.

Andreus declared in his mixture of Eskimo-Danish-English that this settlement had probably been a semipermanent hunting camp, abandoned when game became scarce—not unlikely, the very name of our isle of Natsiorsiorfik being translatable as "place where certain kind seal caught." Andreus was coming along well with his English. Despite his Cockney aspiration-"hice" for "ice," etc.—his pronunciation was no worse than my Eskimo. To keep himself occupied he was building a two-dog sledge for the two dogs we had purchased at Augpilartok. Near his hut stood a pile of caribou horns. When I asked why he was saving them, Andreus explained at great length, and with much pointing and gesturing, that the marrow was soft and could easily be carved out, leaving the horns hollow; that caribou horn is less brittle than ivory and less apt to split; that by sawing the dried bone into slices he would furnish himself with a supply of harness loops for the dog traces. It is in such—to us—roundabout fashion that the Eskimo explains everything, proceding logically step by step from the remote and general to the immediate and specific.

His hut displayed far less art than his carpentry. Thick sod walls enclosed a nine-foot square, reached by eight feet of low "hands and knees" tunnel. It was roofed over with sod, supported more or less on the cantilever principle by an oar extended over the two six-foot-high side walls. The nearly flat roof was certainly not rainproof; but except for a small opening in front it sufficed to keep in most of the fumes generated by oil lamp and warm bodies. One could tell at a distance how many were at home by the volume of steam escaping through this vent.

The tunnel's outer edge was dignified by a box-board door, whereas the inner end was draped with a scalskin curtain. Passing this, one was confronted by the customary platform bed built of

scrap lumber and covered with skins. This filled most of the interior. Minor treasures, including a clock, telescope, and butcher's knife, were laid wherever convenient. The walls were covered with illustrations in color and in black and white cut from discarded magazines, and near the edge of the bed was fixed an openpan lamp, used for both light and heat. Blubber oil provided the fuel, dried moss material for the wick. Tending the lamp, especially the unreliable wick, was the duty and pride of the hut's mistress, in this case Andreus' aged mother, Betsy, who was scarcely able to do anything else.

That Oriental crone presented an unforgettable picture to the caller. Sitting on the floor in inimitable Eskimo fashion, her stiff legs straight out before her in their sealskin hip boots; the upper half of her back, doubtless from long years of sedentary toil, bent sharply forward, almost horizontal and parallel to the legs, as though there were a hinged joint across the middle of the spine; her still dark hair elaborated into a formidable knot perched atop her partly bald head—like an automobile radiator cap ornament, analyzed Max with cruel accuracy—and secured by a ribbon whose black color proved that she was neither virgin (red ribbon), libertine (green ribbon), nor married woman (blue ribbon), but a widow; her long dark wrinkled gum-fallen face erect to peer at us dimly between narrow eye slits; reeking of age and sweat and dirt and uncured seal hides; she seemed the epitome of all that is strange.

Such were our retainers; our diversions; our common routine. Daily the foehn winds blew from the icecap, shrill and fast, and the sky was spattered with compact little foehn clouds like flattened bullets, yet resembling still more dirigible rocket ships. New ice appeared from time to time in the fjord. There was an unmistakable expectancy of conflict in the air.

Snow and rain alternated almost daily. Then mostly it snowed. Max and I now had a good deal of time on our hands, and ever less daylight. As he was very inquisitive concerning Eskimos, I unburdened myself of experiences gained in previous expeditions: entertaining myself, economizing on kerosene, and keeping Max from too much reading.

Chapter 7

WEEK-ENDING WITH ESKIMOS WINTER TALES TO MAX

I WAS on my way home from Mt. Evans. Our station there stood about four hundred and fifty miles farther south than Natsiorsiorfik and inland one hundred miles, near the end of the Söndre Strömfjord. As the name implies, the Strömfjord resembles a river.

The preceding summer and winter had been spent in geological studies that often took me great distances from Mt. Evans. Travel was arduous because of inadequate snow; and though I finished ahead of schedule, I was very glad to be finished. A number of Eskimos at the station extended me cordial invitations to visit their homes *en route* to the coast. Since I should have been obliged to loiter in port several weeks waiting for a ship, I embraced this opportunity to gratify their hospitality and at the same time secure an intimate view of native life. Mathias, Enok, Hansi, and I made up the coastbound party.

Now, three days after starting, Mathias signaled that we had been seen by the Sarkardlit villagers across the fjord just reached. A boat had been put out and was rowing toward us. Three girls and an old man made up the crew; at the rudder sat one Abraham, who shouted the news that his son had shot a narwhal! This is a feat carrying prestige equal to being dubbed knight. The narwhal is indeed a medieval sort of animal, for its slender spiral lance is the original of the unicorn's as portrayed by artists—a three- to five-foot spirally grooved tusk formed prosaically by the neat intertwining of two enormously elongated upper jaw teeth.

The crew landed to assist us with our baggage, while Abraham announced further details to any who cared to listen. I did not. I stood staring at the beached umiak with forebodings soon to be justified. Into this twenty-foot skin boat were piled, one after another, our baggage, our sledge, our four persons, two snarling, snapping, roaring, tangled dog teams, and presently the crew. Off they rowed with a reassuringly slow, rhythmic stroke. But at the end of each sweep the old man creid "Asut!"—"More pep!"—and asut they gave it. Faster and faster grew the beat, the oars shuttling back and forth indifferent to the waves lapping within a few inches of the gunwales! The dogs redoubled their outcries and their struggles; I expected the worst; the rowers found new energy! Then one called, "Aso!" and all rested—before recommencing the entire procedure.

Progressing this way between frenzy and calm, our Noah's ark reached Sarkardlit in two hours. The entire population of eighty-six inhabitants and countless dogs lined the shore to watch our approach. As we landed there broke loose a riot of dog fights, Eskimo shouts, screams, smashing of baggage, crack of dog whips and accompanying yelps, all caused by the ferment innocently introduced by our strangeness. I, the Visitor, was naturally the center of attraction. When I walked off with dignity toward friend Mathias's house I was followed by most of the men, many women and children, and all the dogs, even including those who had brought us from Mt. Evans.

Mathias owned a one-room frame dwelling, the palace of the village. I was curious to see how it differed from the traditional in its furnishings. One-fourth of the twelve-by-twenty-foot room was occupied by the family bed, a board platform about a foot high, and large enough for amateur theatricals. In most huts the bed serves also as table and seat. Mathias, however, was a man of importance, and boasted in addition a small table and three boxes for chairs; in one corner a small box stove burned peat and willow

boughs. Three two-by-three-foot windows were supplemented by an oil lamp. The rear wall was papered with French and Danish newspapers, against which was displayed as a work of art the sign "Naturimet Kiserto Kasa Nolik." It was pointed out to me proudly as the effort of Mathias's thirteen-year-old son. It meant "Spitting on the Floor Is Prohibited."

When the room had been swept clear of dogs and children and the scattered coal was restored to its pile beside the stove, Mathias gave orders for the evening meal. This consisted of boiling a pot of meat from which each of us in turn fished out chunks to eat. Forthwith I was invited to share the family bed, Mathias extending the invitation by placing my sleeping bag on it.

"Plenty room, very good," he smiled.

I glanced from my host's friendly face to the platform bed to his wife and aged father and thirteen-year-old son and ten-year-old daughter, and two other relatives whom I was not yet able to place.

"Thanks," I said rather hurriedly, and added lamely, "but my bag will be too warm down here."

Mathias only nodded. He knew that white men were peculiar. Accordingly, my belongings were carried up a ladder in the kitchen to the garret above. The tundra floor of this raftered chamber was littered with dead auks and rabbit skins and well-greased hunting equipment. As it was very vigorously haunted by the smells of all the murdered animals I doubted whether I had done well to refuse a share in the communal bed below. But my preference for reasonable privacy forced me to reconcile myself to rabbits and auks, however strong. I took a cautious breath and laid out my sleeping bag.

Before retiring for the night I crept down the ladder and headed for the outdoors. My coming upon the family in various stages of undress left them expressionless. With an effort at casualness I passed through the door. A minute or two sufficed for the dogs to recognize me and calm their furious uproar to a chorus of barks and growls, and then, my business done, I turned back toward the house. Before me flitted a tiny figure, ghostly in the starlight. What could this be? Before I recovered my startled senses the figure had disappeared—into the house. Mathias's half-undressed six-year-old had come along to see what the ever-inscrutable white man was up to.

The next afternoon I was scheduled to have all the neighborhood elders in for coffee. It is customary in Greenland villages for strangers to entertain as well as to be entertained; and, preparations made, I now seated myself in a prominent spot where all might stare to their hearts' content, and awaited the arrival of the first comers.

Soon there was heard the sound of approaching footsteps: the merrymaking was about to begin! I straightened up on my box chair. A dark face peered furtively in at the door.

"Kanok-i-pit?" I cried heartily.

"Itlitli!" (The same to you!) mumbled the caller, visibly embarrassed, taking a seat on the far corner of the platform bed.

One by one, others followed and slipped silently into their places. Scarcely anyone so much as murmured. Where is the corpse, I kept wondering; and noted that they stared at me sympathetically, as though I failed to realize that I was it.

Coffee was then poured by Mathias's wife. Made in a huge boiler kept on the stove, it was necessary to dip a smaller container into it to pour for the guests. With the coffee hard biscuits from the Olsens' supply were served as a novelty, a departure in Greenland entertainment. Under the fluid's warmth conversation commenced to thaw, first in solitary drops, then in spatterings and chunks, led by the less uneasy native helpers of former expeditions. As the visitors braved the dangers of speech, they rewarded themselves by sucking up their coffee through sugar lumps, as was customary. Mathias interpreted the more difficult exchanges. The

air grew thick with sporadic talk and tobacco smoke, through which the seal-oil lamp reeked dully. Perhaps the fog was partly personal, for politeness had demanded that I smoke and drink with everyone in turn. Certainly my head swam as I replied to endless questions about the expeditions, the icecap, our radio, my parents and home, what we ate in America, etc.

Six hours later, when I had shaken hands with the last guest and acknowledged the last "Ajungilak" (Good), Mathias declared that my reception had been a success. To judge by my fatigue, it had been a great success.

The floor was now taken over by the younger generation. Treasured caribou hooves and legs brought by Mathias from a winter's kill were produced and played with as toys. Even the three-year-old with his knee-high knife calmly whittled off bits of meat as a clever white child might peel a banana.

At seven that same evening I went to pay my respects to one of my callers, Nathaniel the narwhal killer, who had been along on last year's expedition. Crawling through the dog-filled tunnel, I found him in the dome-shaped sod hut seated at a table. His father Abraham sat on the edge of the platform bed beside a sleeping child, while an adult audience of four crouched in a corner to watch the feast, which began promptly with a huge bowl of rice apiece set on the low box between us. Nathaniel was sweating freely. His role as host seemed to embarrass him beyond reason. Choking down the heavily onioned rice—I detest onions or onion flavor-topped with yellowish sugar to make it palatable, I chatted valiantly to put Nathaniel at ease before his visitors. Fortunately the scrutiny of an audience was by now too familiar to bother me. Though both of us were sweating like wrestlers after we had drained our cups of steaming chocolate, I had the satisfaction of knowing that my host had been made to appear a boon companion. This, with the fact that he had ventured with an expeditionary party out onto the dread inland ice, where no life endures, was sufficient to insure his prestige for a long time to come.

Nathaniel gave me a sign to remain seated when the dishes were cleared. Ignoring the villagers in the corner, he produced from under the bed a shiny violin lacking one string. I crushed down my surprise and prepared for whatever might follow. The villagers, I saw, were regarding the musician expectantly; and as he slowly strangled the three remaining strings and took an attitude of assurance, I too assumed a hopeful expression. Presently the strain of a weird Greenland song pierced my ears. Then without warning Nathaniel stopped playing. The villagers showed no awareness that the song was concluded.

Abraham, not to be outdone by his distinguished son, took over the instrument and caused it to utter "Pop Goes the Weasel" in very dolorous fashion. Perhaps he had heard the tune on some settler's phonograph. That Eskimos are excellent mimics I already knew, for after a single radio program a youth with our party that winter had been able to sing popular dance-hall ballads, of whose meaning he had no conception—a feat of pure memory that few professional singers could equal. I expressed my admiration at Abraham's performance, and was enthusiastically rewarded by more and more of the same tune.

Until a late hour the three of us discussed music, sealing, ice, caribou and the more prosaic topic of weather over our pipes; and then with an "Ajungilak" I took my leave. Halfway through the tunnel I stumbled over one of the sled dogs and fell headlong into the yelping, thrashing pack. My anorak was ripped almost completely off my back before Nathaniel could come to the rescue. Thanking him a little breathlessly and repeating my good nights, I crawled out of the tunnel, the dogs still disputing for the fragments of my shirt. My first day in Eskimo society was at an end.

I awoke to find my sleeping bag covered with snow, and more drifting down through holes in the garret roof. It was pleasant to lie there. The sleeping bag was so snug that I could relish the chill of the snow sharp on my face and exploring hands. Hardened as I was, not even the evening spent in the close air of Nathaniel's hut could develop a headache to mar my comfort, though of the eight persons present I was the only one who had ever had a bath or ever would. Perhaps, I thought lazily, the seven Greenlanders had suffered from my white man's smell. Certainly they never notice each other more than white men do. Should I sleep some more or get up and eat? The Mathias family was astir down below.

After a breakfast of coffee and cold narwhal's hide, I gratified the family by taking photographs, then set off to survey the neighborhood. Young men of the village were conspicuous everywhere. They leaned against convenient walls, smoking and talking and waiting for something to happen. One man, more alert than the rest, was encountered hauling home a seal. Seeing that no one offered to help, I volunteered my assistance. Accompanied by yelping choruses of pet dogs-four or five hungry mouths lurked about the entrance of every house tunnel, although Mathias alone kept a team—we arrived at his hut with the rabble very literally at our heels. My strongest impression of the village was of such canine and human congregations. Householders, like their dogs, were always dropping in on each other in gangs. Whenever Mathias wished to eat, which was often, he was obliged to clear himself a place at table, while the others sat about and watched his technique. I cannot hear the name Mathias even now without seeing him in characteristically determined pose, hunk of narwhal hide in one hand, upraised knife in the other.

As I circulated about town, baby after baby and dog after dog were brought out for my admiration. I conceived a very real admiration for my own politic hypocrisy in saying the same trite things in different ways about each, although the babies even more than the dogs seemed alike as peas in a pod. I cannot swear that the same baby was not sneaked from house to house ahead of me. It

was fortunate that these simple people had not yet discovered the politician-unmasking question as to which parent the pea resembled most, or I might have been run out of town on a whale's spine.

Mathias's wife behaved a little oddly when we sat down to lunch. Sure enough, she had a surprise for me—fried caribou! This was a welcome treat after boiled caribou, boiled seal, boiled narwhal, boiled everything. I displayed my gratitude by eating with Eskimo heartiness, taking my portion along with me when compelled to go outside to watch an ear-curdling dog fight. Our traveling companion Hansi's king dog had let himself in for trouble by nosing the pups royal of Mathias's team. When the queen bitch found the stranger thus occupied she did not wait to investigate but yelped for the militant lead dog, Otokok, who came charging at the head of his eager-fanged troop. Fur began to rain upward. The outlook was bad for the unfortunate nucleus of the whirling, snarling nebula, but intervention came from above as clubs descended before any of the heroes was badly injured.

At feeding time there was another thrilling battle. Two Eskimos clubbed out an open space in the thick of the dogs, then overturned their pails of fish. Instantly the clubbers were swept into a tornado of roaring, jaw-clicking furry bodies, dogs clambering and leaping over one another to snatch the food before it touched ground. Because of his great size and strength, king dog Otokok secured the choicest pieces. Having gulped a mouthful, he would make a jump, snarling, at the possessor of some desired fish, which would be dropped without argument as the owner scuttled for safety, tail between legs. Otokok saw to it, however, that his bitch was allowed to eat unmolested. When the meal ended as abruptly as it had begun, and both were filled and content, he remained gently licking her forehead.

The next day a dog suffering from distemper was to be hung. This more humanitarian form of execution may originally have had a basis in economy, but as Mathias explained to me, a bullet might not take immediate effect, and then a stark-mad dog would be running amuck; whereas hanging is sure and speedy, not a snarl being heard. As I was photographing some rock structures I saw the condemned dragged off toward a ladder against the church wall which served as gallows. The entire population of Eskimos followed idly.

In my wanderings I approached the wooden village church, resonant with the murmur of voices. What service was conducted on a weekday, everyone visibly loafing or at work as his taste might dictate?

Pushing the door ajar, I peered into a whitewashed interior dimly lit by four windows and as many seal-oil lamps. A score of little Eskimos sitting on benches fringed a long table, at the head of which the local catechist sat in dignity. Opposite the sheeted altar large maps of Greenland and of Denmark proclaimed that the village church was also the village school.

The teacher became aware of the children's distraction. As I was about to leave with a word of apology, he rose and came toward me.

"Welcome," said he in bad Danish, the dark round of his face sliced by a smile. "Welcome to our institution of education."

"I just looked in to see-"

Beaming, he cried a command in Eskimo that caused one of the older boys to bring a chair from behind the pulpit to a place at the end of the table.

"Don't let me disturb you," I protested weakly.

I was herded to the chair and lessons recommenced. It developed that I had missed the opening prayer and hymn, and was in the midst of the recitation period. Dâvip, Iisâp, Jâko, Mâria, Jûta, as well as other biblical names came through the welter of Eskimo to reveal what book was used as text. This may not have been due to the teacher's alternative profession. The catechist apparently owed his position to an ability to read, if not better, at least faster than any of his pupils, who ranged in age from six to fourteen.

A small globe was now brought out, and a geography lesson begun. The class was conducted as a formal drill. Apparently the pupils had memorized the content of certain passages. They were parroting obviously meaningless replies concerning Danish export of dairy products. The children had never seen a cow or a chicken—didn't know the taste of butter, eggs, or milk. I asked the catechist if he knew the importance of blubber from Greenland in making oleomargarine that is used so extensively by Danes as a butter substitute. He had not realized that Greenland seal and whale blubber make possible the export of Danish butter.

I was already acquainted with Greenland methods of computation—up to ten on the fingers, to twenty on the toes, etc.; twenty-six, for instance, being designated as "one man" and the first finger of the second hand—i.e., twenty fingers and toes plus the sixth finger. In this class, more formal arithmetic was taught. Slates and hare's-foot erasers were much in evidence, and despite the catechist's dissatisfaction, expressed by pointing to his head and saying "Iarpok" (Bad) he could not conceal the fact that several of the children were better than he at figures.

School closed with prayer and hymn. The girls filed out, followed by their brothers, leaving me to thank the teacher and catechize him. It seems that he was paid 318 kroner yearly for his services. Asked how he could live on a mere eighty dollars, he explained that spare time was spent in his kayak, hunting in traditional fashion. I promised him some illustrated English primers which he desired, and hastened after the departing students.

Their playground was discovered atop a hill overlooking the smoky huts of the village. The field, about an acre in size and rough with boulders, was the only level area large enough for games. The sport was correspondingly rough. Two boys started the game by straining and tugging at each other while attempting to kick a grass-stuffed sealskin bag, as in soccer. Others joined in at will without regard to the strength and numbers on the two sides.

A total absence of observable rules promoted such tactics as thumping, shoving, pulling, kicking and tripping—the last invariably being greeted with hilarity when successful. The boys were alert and very shifty on their feet; some would have made good soccer players. It was no game for weaklings, especially when grown men joined in, as happened when hunting was poor.

I tried my luck for a few minutes, but my thin kamiks gave little protection. Discreetly—I thought—I retired to the side lines to watch. A solitary spectator is a tempting target for snowballs. I was soon obliged to forget the contest and recall my experience in dealing with small boys in order to divert the snowballers' energy in competition directed at other, less sensitive targets.

When all were wearied, the boys gathered around a pot of boiling water that some "kid brother" had been tending dutifully. Seal fat and tea appeared out of nowhere, and the strenuous afternoon was capped by a meal.

The girls, in the meantime, indulged in the milder pastime of building snow walls and then breaking them down. Because of their sex they were obliged to wait on the fringe of the group, to be given what was left.

That evening I attended church services to watch the catechist preside in his normal capacity. The idea of an Eskimo willing to sacrifice time and energy for less than a pittance in the behalf of his fellow men was intriguing. Furthermore, his clear enunciation, and deliberate manner of speech made it a pleasure to listen to him.

The Eskimos seated themselves in a semicircle. An old native minus an eye mounted the seat of honor after the opening prayer and hymn, and for an hour droned out long Eskimo words in his reading of the text. The catechist sat at his elbow whispering instructions and being generally helpful.

Leaving, I was invited to Nathaniel's home for chocolate. An even dozen of us were sipping and chatting confidentially when three round-faced lasses appeared and were introduced as Mata,

Johanna, and Daroti. Johanna, I noticed, was quite good-looking. Father Abraham played his tune on the violin, and the atmosphere became decidedly informal for an Eskimo gathering. As I bid the assembled guests goodbye, I found that Nathaniel and the three damsels had accompanied me.

They must be going home my way, I reflected. The night was a fine one, and Nathaniel and I conversed philosophically, as men will, while the girls whispered among themselves. In the back of my mind I was a little surprised at Nathaniel's courtesy in acting as escort. Having reached Mathias's door I thanked him ("Kujonok"), repeating my good night, and climbed to my garret chamber.

The four of them climbed up after me.

I stared at them uneasily. What was I expected to do? Were refreshments called for again—would we be making the rounds all night? Maybe they had misunderstood my goodbyes. Repeating them once more, I lit a candle preparatory to undressing, and began to remove my boots.

Daroti smiled. Conversation began again, touching lightly upon the condition of the garret roof, on my sleeping bag, and at greater length on the hunting equipment strewn about among the dead auks and rabbit skins. It was a great relief when from the room below came Mathias's growl of protest, and Nathaniel hastened downstairs.

Since the three girls were slow to follow, I gestured after my departed friend. This time all three smiled and nodded. They lined up beside the sleeping bag on which I sat. Johanna raised her eyebrows questioningly, pointed first to herself, then in turn to her two companions. What did she mean? She was telling me to make a choice!

I stared helplessly, then shook my head with considerable emphasis. It is possible that Johanna interpreted my trouble to be difficulty in choosing, for now she pointed only to herself. Her delicately curved tan cheeks and small features made her the most

attractive woman I had seen in months. By blood she was almost as much a European type as Eskimo, and I had never been prejudiced . . .

Chapter 8

MORE VILLAGE LIFE WINTER TALES TO MAX CONTINUED

MAX DEMOREST glared as I halted my narrative. "Well!" he cried impatiently; "Well! Did you?"

"No," I confessed, rather sad. "Mathias told Nathaniel he wouldn't permit any confusion in the attic above him—he wanted to sleep. Nathaniel ordered the girls to go down."

"Oh!"

"The girls didn't seem discontented, but I was—after they left."
"So this is the famous Eskimo hospitality I've heard so much

about," mused Max.

"Is that what first interested you in the North? Maybe if you go down to Sarkardlit and tell Nathaniel I sent you, he'll offer to 'stand treat' again."

"Go jump in the fjord! But what did become of Nathaniel that night?"

"He explained he had an eye on Mata, so I suppose—"

"But the third girl? Where was she to have come in?"

I looked at Maxin amazement. "I never thought of that," I said.

He continued silent for a while, staring at the snow falling like a lace curtain outside the window. "Bill, I think you'd better not tell me any more about your experiences, if they're going to be anticlimaxes like that."

"Now, Max, you know you're enjoying my reminiscences."

"O.K.," he groaned. "If I must enjoy them, I suppose I must. What did you do the next morning: apologize like a little gentleman for spoiling Natty's party?"

I ignored the slander and told him that it had been arranged for me to leave that morning for Sarfanguak. Two seal-hide purses were pressed on me as gifts by my hostess, Mrs. Mathias. The aged mother of my traveling companion Enok tottered down to the shore to shake my hand, as did almost everyone in Sarkardlit, large and small. With a boatload of baggage, dogs, kayak, and twelve passengers, the six girls at the oars got under way.

"Johanna?"

Johanna was not along. After a while a sail was raised with some difficulty under the direction of the men aboard, who, since they did not row, had to smoke to keep warm. Eventually Sarfanguak's 126 inhabitants were seen waiting to repeat my Sarkardlit reception. I was warmly greeted by Hansi, the fourth man of the party from Mt. Evans station, and by David Olsen and his wife Annie Maria. David and I had become acquainted the previous winter; he was to be my host.

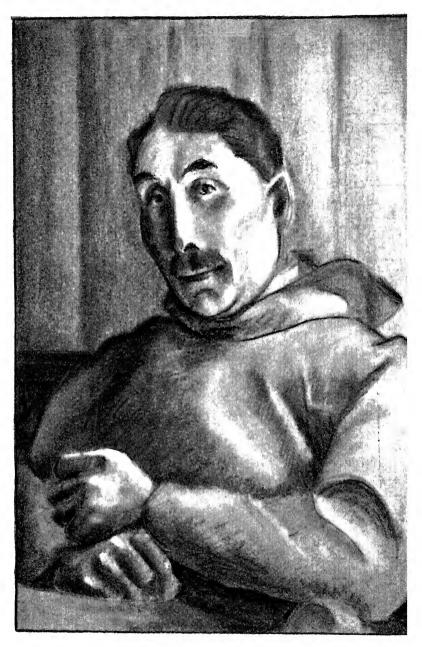
I found his household remarkable for the collection he had made of adopted children. Kristine, whose father lived next door, had been given to the Olsens when a year old, and had turned out to be a rather attractive-looking girl who sewed and baked and was a dutiful daughter. Sturdy Hendrik had been adopted ten years before at the age of three. Hendrik's little brother Holger had come to visit him last September and was by now in a fair way to becoming a household fixture himself. David's employees, Susan Gulan and Gurmand Bertelsen, were likewise pretty much part of the family, which thus included one-eighteenth of the population, although the Olsens were a childless couple!

David could well have afforded these adoptions even if his dependents had not earned their own keep. The local store and bakery were both his, as was the office of local trader which paid him a trifle each year. My second-floor room was furnished like a hotel with lounge, phonograph, and writing desk stocked with stationery. In the mornings I was to have tea in bed. I half expected at times to find a uniformed bellboy at the door.

The buxom Kristine's fifteen-year-old sister often dropped in to talk, enlivening our company with her good nature and fresh looks. Unfortunately, young as she was, this girl had already reached maturity, which in Greenland women implies the abandonment of youth's grace for a ducklike waddle and a forward inclination of the torso, which is caused by the habit of working bent over in cramped quarters.

I found time during my brief stay to compare the village school with the one visited in Sarkardlit. Here there were separate desk and chair for the teacher, tables with inkstands and bookshelves for the children, a wall blackboard, and a catechist-teacher whose six years of training at Godthaab Seminary showed plainly in his pupils' confidence and ability. The division of the school day into three periods by recesses, to avoid restlessness, seemed a feature worth imitation in our own elaborate institutions. During the geography lesson I was called on to trace my wanderings on the globe. The children followed my finger wide-eyed, and when I went on to recite and write the English alphabet as an encore, they broke out into murmuring wonder. Brilliant stranger!

Each morning the younger generation gathered to watch me brush my teeth. From the corner of my eye I could see them mimicking the absurd gestures of this rite, so unnecessary in a race whose infants are very nearly weaned on tough seal hide. But the true sensation came when I suggested my desire for a bath. Sarfanguak rocked with the stunning request. A bath! Had I volunteered to skin myself alive, no greater shock would have been caused; and wherever I strolled through the community I could feel eyes on me in pity and wonder. The resourceful Mrs. Olsen, not to be daunted by any request, however unnatural, rose to a new height of hospitality and promised to prepare a bath, a hot one, with steaming water. I cannot deny that the rumor running presently through Sarfanguak that I had actually bathed, was true.



DAVID OLSEN

No sooner had the excitement occasioned by this scandal died down than a strange motorboat entered the harbor. "Angutelerak nakosak! angutelerak nakosak!" cried the villagers in surprise, hastening down to the water's edge.

I followed, puzzled. Angutelerak I understood. Angut meant man, telerak the narwhal's propelling tail, the two together signifying man-moved-propeller-tail, or motorboat. Sometimes the imitative word taktaktak was used instead; in South Greenland, a motorboat was pryontelerak—smelly-smoke-propelled-boat. But why the passenger nakosak? Why greater skepticism here than in the south? There, the visiting government physician was not nakosak but kalsorsaufak, a man-who-tries-to-cure-sick-person. Eskimo inertia—Kristine Olsen, for example, had never been to Sarkardlit, ten miles away—explained the difference in dialect, but could not account for the cynicism of calling a doctor man-who-might-cure-sick-person.

The angutelerak had by now approached within hailing distance. Standing in the bow, the government physician proved to be a well built Dane of perhaps forty-five years. An Eskimo told me that this was the earliest a doctor had ever arrived in Sarfanguak in his annual 350-mile circuit of coastal villages. Usually the water was not sufficiently open until May. Only direct need, epidemic or famine, could of course induce him to fight Arctic blizzards by dog sled.

Dr. Holbeck greeted individuals in the crowd by name, looked with surprise at me, bowed and smiled, and then, having given orders to his native helper, advanced leisurely up toward the settlement. After refreshing himself with tea, he disappeared into the warehouse, which is his consultation chamber here. When I entered, the bare, gloomy room was crowded with men, women, children, infants carried in their mothers' arms and aged creatures whose sex was hardly distinguishable. All ill or hurt, or those who had suffered illness or injury at any time since Dr. Holbeck's visit

the year before, attended. Stolidly they sat about on boxes and crates, leaned against walls, or, if too weak, placed themselves on the floor with legs thrust straight out before them.

David Olsen acted as an interpreter although his services were hardly required. The exchanges between the doctor and patient were very few. David seemed to know what was wrong with each patient, and some of the natives went through the clinic without uttering a syllable. The patients stood in a line awaiting their turn. Stolidly they waited, each wrapped in his own thoughts. The range of cases ran from scratched fingers to the moribund. Several went through the clinic to satisfy their curiosities. I noted one person who was apparently malingering.

"Shamming?" I asked, as the Eskimo turned away, a broad grin indicating his satisfaction.

Dr. Holbeck shrugged. "Neurosis, my colleagues in Denmark would call it. Just the childish human need for attention, mostly unconscious." He paused, reflecting. "I had a woman whom I treated for a flesh wound in the leg. Next year I had to swab the place with iodine, and the year after, and the year after—her desire to remain important in her own eyes made her feel a 'pain' there. Finally even she had to admit the cure was permanent. I congratulated myself on disposing of this troublesome patient. No severity, no endangering of the Eskimos' confidence in me; just tact and persistence. Well, on my next annual call she had the 'pain' again. This time in the other leg."

I expressed surprise at finding tuberculosis the most prevalent disease among Greenlanders. In so dry and crisp a climate, I reasoned, the mortality from respiratory ills should be exceptionally low. Dr. Holbeck admitted the healthfulness of the climate. However, as he pointed out, these people spend much of their lives in damp sod huts; hence their environment is more unwholesome than that of city slum dwellers! The women being so much indoors suffer proportionally. Tuberculosis is such a commonplace

that when informed of the dread malady the patient usually appears indifferent, although assurance that he is—as yet—unaffected may cause him to wring the doctor's hand with joy. Even during his present brief stay, Dr. Holbeck expected to ease the last moments of two of his patients.

Twenty-four hours later, one of the cases died. This was a man of fifty-one years. Dr. Holbeck said that at the last the patient acted as though resigned to whatever might come. Now relatives and friends were preparing the body for the death house, a sod structure about a foot and a half high, a yard across, and some seven feet long, where the corpse must by law lie four days before interment. David Olsen explained that this delay was necessary, but for what reason, I did not learn.

When I arrived with the mourners, who were taking the matter very calmly, the top was off, as is always the case when the death house has no tenant. The body was lowered gently into place with no accompanying ceremony. A few days later, when Dr. Holbeck had departed, the roof was again removed and the body carried in a roughly built coffin to a dismal boulder-strewn hilltop overlooking the fjord, where it was buried beneath the customary cairn of stones. Pathetically, relatives of the departed planted gay bits of colored cloth on the stones in place of flowers.

"And not a word about Kristine!" exclaimed Max.

I looked pained. "We were good friends," I said with dignity. As Max seemed skeptical, I went on hastily, "Kristine was very nice, but two husky Greenlanders were already courting her, so I contented myself with studying their approach."

"Picking up pointers?"

"Yes. They would come around after the hunt with token offerings of choice cuts or skins. Peter was a good provider for his aged parents, but Mati, I think, had an edge. He had killed his first seal when only twelve. Neither of them apparently considered me dangerous as a rival, nor even a restraint on their love-making.

Toward each other they behaved without any signs of jealousy."
"Whom did Kristine marry?"

"I don't know. I did see one Greenland wedding, but that was at Sarkardlit a few weeks earlier. Everyone in the colony gathered at the church for the ceremony—the groom sat on one side of the church with the men, and the bride on the other with her giggling friends. In the midst of the sermon the preacher called them to the pulpit and went through the ritual of a Lutheran wedding. Man and wife returned to their respective seats, and when the services were over, each went home his own way. Later in the day, the groom, followed by a crowd of friends, idlers, and dogs, strode up to the bride's hut, and from there carried her bodily to his own home. That made the marriage official. I suppose the bride's resistance, as in early times and a few remote districts still, was mainly for show. Certainly, when we gathered at her new home for the wedding feast which followed of seal meat and matak, hard bread and native beer, she seemed not discontent as a hostess. I had a swell time. By then I was able to converse with a mouthful of food as well as any Eskimo. I had more trouble with the native beer. It's pretty strong, especially when taken in the quantities such an occasion demands."

"I'm surprised you remember anything at all."

"It was an unforgettable spectacle. Everybody dressed up in his colorful best, dark round faces shining with sweat and enthusiasm—heat—smells—tobacco and oil smoke—beer, food—startling purple, blue, pink, and yellow anoraks like lightning-shattered rainbows; trousers decorated with brilliant vertical stripes that a bandman would envy; shiny Sunday-best kamiks.... And our host, in his casual manner, gave little thought to his bride, and from his attitude it was impossible to tell that this was his 'wedding night.'"

Chapter 9

WHAT THE WELL DRESSED ESKIMO WILL WEAR WINTER TALES TO MAX CONTINUED

THE Eskimo has a clothing problem second to none. If he is ill dressed he is banished from society—for eternity.

It is hard to appreciate the importance of clothing to the Eskimo without having first passed a winter in the Arctic. The Eskimo, more than any other human being, except the deep-sea diver, has to guard constantly and in detail against the inrush of the bitterly hostile medium in which he is immersed; and seldom is the diver exposed to danger for more than short intervals. If the comparison seems overdrawn, consider how long an unprotected man could survive in minus sixty degrees temperature. Scarcely longer than the diver deprived of his diving suit—which somewhat resembles the uniform of the Eskimo prepared to plunge into icy winter air.

The Eskimo, like the diver, is massively booted, sometimes doubly booted. The rest of his figure in winter furs is not less clumsy than that of the man dressed for underseas. Bulky fur trousers worn over cotton jeans are surmounted by an equally bulky fur jacket, which rises into a large globular hood affording complete protection from the surrounding element, save in front, where a circular opening is left for vision and air. Were this small opening glass-covered, the resemblance to the diver's helmet would be completer. On his hands and high over his wrists the land diver of the North wears immense mittens of sealskin.

The hooded fur jacket or parka worn over the cotton anorak is known as the timiak. Prosperous Greenlanders wear native cari-

bou-skin timiaks; the less fortunate must content themselves with imported Lapp skins of reindeer, which are stiff, clumsy, and heavy. Our own parkas, one caribou, one Lapp skin, reveal that in the most equalitarian of communities economic differences may affect survival, for one, with its caribou ears projecting like devil's horns from the hood, is all that could be desired; the other, a conceivably fatal handicap. Timiaks characteristically are loose and warm, dry readily, and can, if necessary, be used with comfort as sleeping bags.

"The kamiks," I went on, "are the mark of a good wardrobe. No Greenlander can have too many boots. If possible, he never wears the same pair two days in succession, so that they have a chance to dry and be worked over. Their shape is lost each time they are worn. The women have to chew the leather to soften it again—"

"Why not turn sled-dog pups loose on the boots?"

"—and then rework the *kamiks* over a form—you've seen the forms in Andreus' hut—something like a boot tree. That's why the older women's teeth are worn down almost to the gum line. Also, they have to break up the new seal hide that has been tanned with urine. The skin of the bearded seal, for the sole, is practically indestructible and requires days of chewing before it can be used. Boot uppers are generally ringed-seal skin sewed to the soles with caribou or narwhal sinew—narwhal is commoner around here."

"What's the matter with heavy cotton or wool thread? Or would that interfere too much with tradition?"

"Thread stretches. Animal sinew swells in the needle hole, making the seam watertight."

Max eyed me quizzically. "Maybe, professor, you can explain why women's kamiks are thigh-high and men's never more than knee-high and only up to the calf on Sundays? The women don't do sloppier walking. Well—seeing that you don't know the answer—it's like this: once upon a time women didn't have any

kamiks of their own, and had to swipe Hubby's; ever since, they've been wearing sizes too large for them!"

Not only must the *kamiks* be entirely correct, stout and snow-proof and lashed so firmly around the foot that the soles cannot turn, risking a split seam; but every other article of apparel must likewise serve its special purpose without fail.

For instance, the stocking worn inside the boot is no bit of gossamer vanity, you know. It is designed for warmth. Those made of Arctic hare skin are considered luxurious; but, though very comfortable and dry, Arctic hare is not durable. As it and caribou are scarce at Sarfanguak, dog and seal skins are more commonly used. Dogskin stockings are superior for winter wear because they are warmer than sealskin and easier to dry.

Between stocking and kamik sole a wad of grass is always inserted to absorb sweat. A mere detail? Not when freezing of the feet often ends in death, and when omission of the grass leads invariably to frozen feet. The greatest threat of the Arctic is not in low temperatures but in moisture turning to ice. "Keep dry!" is the first law of the North. We ourselves will use packing excelsior as a substitute for grass, and if riding or camping for the night permits wear of a kamikssuak, or larger kamik, as overshoe, it does no harm to place another excelsior pad between inner and outer boots.

Men's trousers are made of carefully prepared hairy-seal skins in Sarfanguak. Although less comfortable than the bearskins worn here farther north, the trousers are warm and waterproof, and last indefinitely. Indeed, Eskimo clothes generally are discarded only after they are worn beyond repair. Suspenders are used to support the trousers for freer circulation of air, which lessens the danger of sweat-soaked garments freezing.

Greenlanders have imitated the Danes with disastrous results in wearing underwear and other cotton and flannel clothing. Dampness and chill from inadequate ventilation usually add rheumatism to the other miseries of age. In numberless such ways the influence of civilization manifested by petty commerce in manufactured goods, upsets the delicate adaptations of a long established way of life.

Sleeping bags are standard equipment, at home or on the trail. After a strenuous day of sledging and beating trail, comfortable rest is essential, for the active Eskimo must cherish his vitality as the diver does his air supply. His sleeping bag is therefore tailored to measure. Too large a bag is difficult to keep warm, a tight one hampers relaxation. My own was made of three caribou skins sewn lengthwise, with a narrow tapering part for the feet, and two flaps at the opposite end, to serve respectively as pillow and head covering. Most Eskimos are obliged to use bags made of dogskin, inferior in warmth and harder to dry. A casing of depilated seal furnishes a waterproof cover for use out in the snow. When one retires for the night, all clothing is removed to minimize perspiration and consequent dampness: a damp sleeping bag soon freezes solid.

But the Eskimo's wardrobe is not limited to purely utilitarian qualities. Much attention is given to decoration, particularly by the women, who are more of the time indoors. Their dress boots are of smooth dyed or bleached skins, ornamented usually with a sort of skin mosaic, and with stripes and bands and scalloped or embroidered tops. Women's sealskin trousers are gay with strips of vari-colored skin in neat designs. Over the chemise a brightly colored cotton jacket is worn, enlivened further by an immense, almost capelike beaded collar reaching down to midarm and almost to the waist, brilliant with individual patterns in the most glowing hues obtainable. In all Greenland, I am told, no two collar patterns are identical.

Chapter 10

ESKIMO WAYS AND MEANS WINTER TALES TO MAX CONTINUED

It is a pity that the effectiveness of their costumes is often spoiled by the shockingly poor posture of even quite young girls, who at the age of eighteen have already spent some several years bent over work in cramped huts. Perhaps Eskimos are compensated for lack of grace by their wonderful—and to me alarming—control of their legs. I doubt whether an adult European could ever learn to sit for hours with legs straight before him. Hunting kayakers are of course forced to assume this position, but as you have seen, women ashore as well as the men actually prefer it, seated sewing, or leaning over to gut fish or clean the floor. One day I saw Kristine washing clothes in a tub placed on the ground. Standing beside it with knees stiff, she was bent over like a wicket in order to reach the water. It made my back ache to see her, so I shoved forward an inverted box to place under the tub. Smiling her thanks at my friendly interest, she stepped up on the box and continued work as before!

Eskimo girls, moreover, early become stout, which does not improve the appearance of their stocky physiques, naturally very different from those of average Americans. These thick-set people not only are shorter-legged than Mediterranean races, but have proportionally longer backs. This largely accounts for their characteristic "waddle" in the close quarters of home. Out in the open, the men at least are often remarkably nimble on their feet. Most carry considerable fat as a result of their diet, which gives a shiny gleam to their dark, round, high-cheekboned faces.

Despite resemblances to American Indians and to east-coast Asiatics, no one has ever been able to "explain" the Eskimos satisfactorily. Both their physique and their culture are to some degree unaccountable. Many diverse theories have been put forth from time to time regarding their origin and spread over Greenland, northern Canada, Alaska, and nearly half a thousand miles of Siberia. In any case, they appear to be an ancient race, as nearly indigenous and as nearly "pure" as a race can be. For thousands of years before the pyramids of Egypt were built their ancestors probably fished and hunted as many still do today, girdling the Arctic circle with a world exclusively their own.

Hunting having been bred in his bones for countless generations, it is no wonder that an Eskimo will drop everything else to grab his harpoon. It does not matter with whom he is, nor how much he has been paid for his services. Eagerly he risks his life and promised earnings to get meat, for the threat of famine always haunts him, and no opportunity must be wasted: the waste would be a sin beyond his imagination to conceive. His hero is the great hunter, his contempt is for the unsuccessful one. Nevertheless, the typical Eskimo is very lazy. Softening contacts with civilization and lack of prospects for true security render him increasingly idle. He hunts when he must, or when he sees game; but he does not hunt for the week after next if he has plenty today.

Only once during my stay at Sarfanguak did the men succeed in shaking off their indolence. The oldsters, nodding wisely to one another, agreed that conditions were just right for a narwhal hunt. Two motorboats and a half-dozen rowboats and kayaks were at length filled—not an able-bodied man was left in town. The remainder of the population, excited with the prospect of a meal of matak, beat a path between the village and a near-by hilltop where a better view of the fjord could be had.

Late that afternoon one of the motorboats returned. Glumly it was explained that several narwhals had been sighted and pursued,

but without success. Some of the smaller craft came in with similar reports. Shortly afterwards the second motorboat appeared, its motor straining, the crew alert; and a stir of anticipation ran through the sparse group waiting on the shore. The whole village had turned out to greet the hunters and cut up the catch before the towed narwhal itself had come into view. It was twenty feet long, its spear four feet. While the women were flensing the beached mammal, the elated crew explained that they had first shot another narwhal, but lost it when the float used to prevent the catch from sinking could not be found on the return trip. Now the animal's heart was opened, and buckets were passed down and filled with blood, later to be cooked into biscuits resembling flapjacks. No scrap was wasted. What the villagers could not use, the dogs ate; what the dogs left scarcely rewarded the crows and the foxes that stole forth out of the darkness. The evening's Bible meeting was delayed two hours for completion of the slaughter.

I believe that the answer to the northern Eskimos' contentment. despite the limited diversions of the village, lies in the cycle of the hunt, which affords them and even Danes a seasonal change of diet and occupation, as well as travel from one hunting ground to another. In summer the northern Eskimo longs for the colder days of autumn which bring narwhal and white whale on their migration south. Winter provides sledging, fox trapping, catching seals in nets, ice fishing and—supreme sport—the bear hunt; until the long night puts an end to all but the most necessary activities. Spring is welcomed as the season for stalking basking seals, while a few weeks later sea birds, narwhal, and white whale return from the south. The dog sledge is now dismantled, and the kayak made watertight for the new season. Summer warmth brings open fishing and kayak parties to hunt seal; in August the Eskimo undertakes the long migration to the great caribou grazing areas at the edge of the inland ice. Thus the native Greenlander, unlike us city dwellers who return to the same office or workshop day after day

throughout the year, always faces the stimulating prospect of change, always lives in the present, yesterday forgotten, tomorrow but a word.

Hunting is his chief occupation, but only one of several in his well rounded existence. Dependent "industries" are the manufacture of boots, tents, clothes, and sleeping bags by the women, and of equipment for fishing and the chase by the men. All boats. kayaks and umiaks and most wooden boats, are of local manufacture. Every colony seems to have at least one extremely competent individual who can make boat frames, which is the most delicate job. With crude implements, the fashioning of a boat is an arduous and painstaking task. Sledges, likewise, are built locally, but their construction is less exacting work. During summer months women and children gather berries and eggs of various game birds, but do no cultivating of an inhospitable soil. There is a certain amount of trapping to eke out the income received from sale of fish and sealskins to Danes. Sale of blubber from the whale, seal, and walrus is the Eskimo's largest source of income. A small sale of meat to Danes completes the economic picture of the Greenlander's activities.

The "biggest" man by far in the village was my host, David Olsen. One of the rooms of his home, which he owned, unlike most native officials, served as laundry, chicken coop, and bakery. It was to be expected that the twelve ragged-looking hens presided over by two equally disreputable roosters would interfere with the laundry and baking, and that these without the assistance of the flock would conflict in themselves; but such was not the case. The washing and baking activities were scheduled for different days, and the chickens were too inactive and long-suffering from cold to worry anyone.

The hens laid no eggs during the long Arctic night, but concentrated all their energies on the summer. It would be hard to duplicate the peculiarly rich odor of these Greenland fowl. Notwith-

standing, I have all respect for the flock, which provided us with breakfast eggs every Sunday and was especially generous Easter, on that occasion coloring its output as well. Another mystery worth investigation is how the roosters could tell time in the winter dark. That poultry should exist at all north of the Arctic circle is wonder enough: what could the village possibly have thought during the eleven days when David had kept an animal too strange to be believed—a cow?

On the twelfth day only the potbellied sled dogs had any longer interest in the matter.

The bakery aspect of the henhouse, alias the laundry, was not the least curious. Beside two long wooden troughs filled with graham flour stood the long-haired Eskimo baker elbow-deep in mush. From time to time he added water to the mixture from an old gasoline drum, his assistant attacking the other end of the trough; and when the dough had taken a thorough beating they joined forces to mold it into loaves. Coals were taken from the makeshift brick oven, and the loaves inserted in their stead. Used to capacity, the troughs produced dough for about 130 loaves of very good black bread, a week's supply for the Olsen store.

The store, which occupied another room in David's house, was shopping center for all the Sarfanguak and Sarkardlit district. A flourishing business was done in staple foods and other supplies, increasing year by year as the natives lost energy and skill in the hunt and relied ever less upon what they could themselves produce. Contact with white man's luxuries had developed a wide-spread weakness for sweets. The villagers have also become inveterate coffee drinkers, like their Danish teachers, and often sell their personal effects to buy the green tropic beans for roasting in pans over blubber lamps. Most of what little money is earned during the summer's fishing goes to make such purchases. Cigarettes took so strong a hold when introduced that David was obliged to ask the Danish officials to discontinue shipment of all but pipe

tobacco; for David has the villagers' interests at heart, and sincerely regrets the degeneration that enriches him. Besides, as village trader he is responsible for the well-being of these people.

A profitable hunting or fishing season caused the store to hum with activity. All is confusion in the small arena before the counter, whereon the scales stand in expectant authority. The voices of the jostling, unwashed, good-natured crowd rise in crescendo to a roar, then die to a hush as some important purchase is made. A burst of laughter is generated by the village clown, and again the tumult mounts deafeningly in the confined space.

All about is merchandise thoughtfully arranged and rearranged. Barrels of flour, of sugar, of barley, stand on one side; the shelves above are gay with bright-colored bolts of cloth; from drawers beneath the counter David scoops up coffee, sugar, rice, and raisins. Better-grade foxskins hang from the rafters. The floor, especially in the rear, is littered with recently purchased skins, scraps of paper, wrappers, old sacks, barrels of blubber, and the coal pile. Here the purchaser digs his own dishful of coal or cuts a chunk of blubber to meet his needs—the trader contents himself with weighing the purchase.

All this is in the half-dark. The only source of light is a heavily shuttered window opened during the business hours—hours subject to David's whim, although in this perfect monopoly all are satisfied customers. Candles are used sparingly. The single one lit is carried from place to place throughout the building as required.

An Eskimo, having brought his bandanna or several-times-used paper bag, prepares to go about his buying. Carefully he looks over all the articles for sale, the flour, barley, raisins, rice, coal, calico, and blubber, the candy and the tobacco and the coffee, as though without any idea what objects money can secure and entirely unprejudiced. He knows what he wants. He comes every day, never buying more than a day's supply at a time, so that he may enjoy the pleasure of coming tomorrow. Finally the articles



GUSTAF

he came to buy seem of a sudden to strike his fancy. He buys. The scales are carefully studied by both parties to insure proper weight, and no one is cheated. As each separate purchase is made, it is paid for at once: the customer lays his fortune on the counter, the trader extracts his tariff and returns the balance. In this manner a half-krone will go through a dozen handlings. The bandanna or old paper bag is swollen with the coffee, lump sugar, and flour—while much joking, laughter, and loud talk pass between customer and trader. Should the swollen bag burst and scatter its mingled contents over the doubtful floor, the assembled Eskimos will howl with mirth.

Regular outlet for their humor is a ragged little waif called Gustaf. All his nine years Gustaf has run about in rags, most of the time barefoot, his mother being lazy and improvident, like himself half-witted. His thin child's body is wonderfully hardened to the cold; no one ever hears him complain. Gustaf is addicted to gleeful pranks. Many an innocent stroller is the butt of his uncanny mimicry; the swaying female, the faltering crony, the swaggering buck—none is too difficult for Gustaf. He constantly shoots furtive glances toward his audience, seeing how long he has to carry on before he can start his begging for sweets. A gun left carelessly around is always too great a temptation for Gustaf; what fun to fill the barrel with snow! The villagers accept his mischief in the course of events. A severe tongue lashing is as far as they will go in punishment. Gustaf only laughs happily.

Greenlanders have a sincere love for children, though more conservative child psychologists might disapprove of their rearing. Eskimos believe that a child should not be denied anything. Children are assigned no regular tasks, for nothing is done in Greenland unless necessity demands. There are relatively as many proud mothers and fathers and doting grandparents in Greenland as in the United States; the baby is always brought forward for visitors to praise and wonder at such beauty. The children do little crying.

One reason may be that with the first whimper the child is given the mother's breast; in fact, a child is never weaned until he is as old as three years. This long milk diet has its obvious advantages, however, for in Greenland meat is about the only available food, and a heavy meat diet would soon ruin the child's digestive system.

It is the opinion of many that a Greenlander loves children as the result of an old custom which dictated that the one who held a child always got fed. One can see why the children were doted upon and kept close at hand. I have never seen an Eskimo, man or woman, strike a child. And woe to the uninitiated who does strike one, regardless of age, for such an action invokes the anger of the whole family and very probably of the entire community. One of the government employees struck a native servant for sampling too freely and spilling his supply of holiday whisky. As a result, the poor man was in unrelenting disfavor among all the natives in his particular district, for each one considered it a personal affront.

John Skelton's

"There is nothynge that more dyspleaseth God, Than from theyr children to spare the rod."

has no place in Greenland, but any traveler is impressed by the charm, simplicity, and sweetness of these northern children. That they have a saving sense of humor or a haphazardly instilled sense of politeness, I have no doubt, for not once did they laugh in our faces when we attempted conversation with them, though it is quite certain they had reason enough.

The indifference displayed by Gustaf's parents and relatives is the more striking in contrast. When Gustaf's shiftless papa absented himself from Good Friday morning services, however, his irate relations rose in a body to berate him, for Eskimos are earnest churchgoers. The flaying was witnessed by a large audience, which fact seemed to embarrass the heretic into attending the afternoon ceremonies. No Danes were present. What must the Eskimos

think of the people who gave them their religion, yet rarely attend church? While the converts were up early Easter morning, singing familiar Lutheran carols from door to door—in the trance of luxurious waking I thought myself for a moment still at home—the Europeans lay abed thinking, no doubt, of the extra schnapps and meals they would consume that day.

Despite his apparent acceptance of the Christian faith as shown by his regular attendance at church, the Eskimo still retains many of his old superstitions. He still believes in magic and charms for good hunting, for averting evil, for vengeance, for the ceremonies attendant upon birth, maturity, marriage, and death. Since faith in magic still prevails in "modern" countries civilized for millenia, little wonder that it is strong where primitive conditions of existence have scarcely altered.

It is not only in magic that the Eskimos have kept to their old ways along with the new. These simple people do not vary their program to impress a stranger: if the program calls for performance of a natural function, the matter is attended to promptly with a more than Greek frankness. The sophisticate Olsens, it is true, retire to an outhouse for their purposes. Not so other natives. They void wherever convenient, usually outside their house door, where they need not lose sight of anything that might be happening in the village. The younger set seem to think nothing of conversing with passers-by on such occasions. If they could be led to express themselves philosophically they would exclaim, "Why, this is a part of everybody's life—like fishing and eating! Why miss anything just because . . ."

The Danes, failing to make the Eskimo ashamed of his body, concentrate their efforts on teaching him to care for it. The task is not an easy one. Too long the natives have huddled in unwholesome sod huts to understand the need for change now that the white man has introduced tuberculosis, measles, mumps, syphilis, and other cruel diseases. Racial immunity is gradually being built

up after disastrous epidemics from even the "children's diseases," though civilized diet, poor ventilation, and old habits of filthiness such as indiscriminate spitting still weaken the Greenlander's constitution. Some progress has been made. Many have learned the need of isolating people with infectious diseases, and life expectancy is slowly increasing. Today the life span of the Eskimo is slightly greater than that of the citizen of the Italian Renaissance.

Disease and death are phenomena caused by spirits who have been insulted. Counteracting and changing the will of the evil spirit is possible only through the good offices of a conjuror, or, in the Eskimo language, angakoq. If the disease is caused by loss of the soul to the spirit, the angakoq will try either to restore it or to provide a new one. This is accomplished through weird incantations, hocus-pocus, and contortions by the conjuror, who works himself into a state of frenzy subsiding into coma. Returning into a conscious state, he blows upon the person diseased, thus restoring the soul.

Though there is difference of opinion between the Eskimos and Danes in matters of health, they agree upon one thing: that it is vital to keep warm!

In addition to blubber lamps local supplies of peat are used for heating purposes. David Olsen's peat supply had been running low, and Kristine was dispatched with three other girls to make the trip to the peat stack, about ten miles from Sarfanguak. They were to take the wooden rowboat. I was strenuously observing curious cloud formations at the time, and received an invitation to go along. Rowing accelerando as usual, the girls whispered and giggled slyly all the way, about what or whom I cannot imagine; and in two hours and ten minutes by my watch we beached our keel on shelving rock ledges. The peat stack proved to be a hut-size pile of blocks stored between boulders. Peat is cut in July and August for the winter use of the entire village. My companions began at once to fill their large sealskin sacks, trudging with loads of fuel on their

backs down to the boat. Upon my offer to help, the girls exchanged amused glances; finally Kristine explained charitably that this was not men's work. I could well believe that. It is doubtful whether I or many men could have kept pace with these girl coolies, who carried immense loads weighing 150 pounds.

On the return trip I was still resolved to play the gentleman, if for no other reason than that it is embarrassing to a western male to sit idle while women transport him. "Let me row," I said. The four girls burst out in concert, laughing. They stared at me and then at their oars, and went off into fresh spasms at the imagined picture. If we came into harbor with the guest at the oars, they would be even more disgraced than I, Kristine assured me. Gloomily I stated that if that was the way they felt about it— The result was that, when we approached Sarfanguak, I was sitting lordly atop the peat bags, barking out the stroke for the crew: "Kâ! Kâ!" (Hasten! hasten!), "Asût! Asût!" (More speed! Step on it!)

But no one noticed our arrival. The beach was deserted, and the girls had started for the village with their burdens before we saw the crowd massed outside David Olsen's house. As we advanced, the sound of excited voices came to our ears. What had happened? A youth, spying us, ran forward to explain, breathless, that David's employee Gurmand had accidentally shot himself.

The village was deeply stirred over the event. Many agitated versions of the news were given us as we hurried up from the shore, the girls forgetting to drop their peat bags, until finally we reached Drend, the unfortunate's companion on the hunt. Waiting, miserable, to learn Gurmand's fate, we at last heard the story.

They had been hunting ptarmigan, and had just discovered a flock a few miles outside the village. Gurmand was leading the way with gun cocked in readiness. He was pleased at the prospect of good shooting, and had turned his head to comment, when he tripped, discharging his gun. A flat rock lay in the ground before

him. The buckshot ricocheted off the surface, spraying Gurmand with lead from head to waist. His shoulder and chest were perforated, his face became instantly a mass of gore. Drend, carrying the agonized body of his friend, was himself soon unrecognizable, so that boys playing outside the village were frightened when he staggered bloodily into sight with his terrible burden. The boys' shouts had brought help. The doctor was inside with Gurmand now.

We hurried through the dog-filled tunnel of Gurmand's sod hut and found him resting weakly after the removal of the shot, his bed blood-stained, himself covered with a pile of soiled clothing. The "doctor"—first-aid-trained wife of the local schooner's motorman—Dr. Holbeck was three hundred and fifty miles away in Sukkertoppen—showed us the shot. Six or seven had been removed from the chest, twenty were massed in the pulverized shoulder. Two shots were taken from the cheek. Three were found above the left eye, one was lodged in the eyelid itself! And Gurmand's sight was spared. Yes, he bled again—quantities of blood—when the shots were gouged out. It is wonderful that there could be so much blood in a man, still more that he should live, having lost it.

I returned to see Gurmand again in the evening. His wife, six children, other relatives, were gathered about and on the platform bed. The household seemed to take the accident calmly and without hysteria. The bleeding had stopped, and Gurmand was so much better that he could add a word now and then to the conversation. This simple acceptance of things as they are is characteristic of the Greenlander—happy when danger is escaped, impassive when the blow falls. I remember Dr. Holbeck's clinic patients who showed emotion only when informed that they were still free from tuberculosis.

I took my collection of farewell gifts to show Gurmand, for the following day I was to leave for Holsteinsborg on the Disko.

Presents had been coming in, the entire week. There were cloth anoraks of varying hues, several seakskin purses warranted to hold all the money I should ever possess, beaded napkin rings, caps that were meant for bigger heads than mine, and a pen-and-pencil case of sealskin, beautifully ornamented. From David I had two umiak models of whalebone. Highly prized was a miniature little-girl's Sunday outfit complete to the tiny kamiks and anoraks, presented by Annie Maria, Kristine's blooming young sister, Kristine herself shyly offering a block-work beaded bag for my future wife. Some simply thrust their gifts upon me without words, others bowed and said heartily, "Inudluarna" (A good trip), taking great pains to explain the virtues of their offerings.

The next day was bright and warmer. Greenland had enjoyed one of the mildest winters known to the memory of the oldest villager; there was every indication of an early summer. A week before, the first flight of geese had passed up the coast around Cape Farewell from Iceland, returning from their winter home in Scotland by way of the Faroe and Shetland islands. Siberian flocks were returning via England, Finland, Sweden, Denmark, Norway, and Iceland. All these faint mysterious honkings from the speeding wedges in the regions of the sky stirred me to vague restlessness. Night and day, the far trumpets called me to be up and doing—what, I did not know. Soon, I thought, they will be flying above my northern Michigan home. And I knew that I was homesick.

With the boat waiting in the harbor, my homesickness, paradoxically, became aggravated. I found that I should greatly miss my generous friends: I did not want to leave the village. For the last time the girl rowers were leading me down to the boat. Everyone but Gurmand was waiting on the beach to see me off. These were not just Eskimos, but people I knew in their strengths and weaknesses, friends and neighbors and others who were indifferent to me, but in any case a part of my life. It was like forcing oneself to leave behind an arm or a leg. I stared severely at the

crowd, at David, at Kristine; I could find nothing to say. I told myself, I will be happy to get home; family, old friends, will welcome me; it will be summer, I will have a good time. . . . I was glad when the boat started and I could turn my back.

Chapter 11

WHILE NIGHT APPROACHES

THE dark rain falls and falls. For five days now it has drummed on the roof, and pools of water stand inches deep everywhere. Our daily meteorological observation resolves itself into the one word, *rain*. Max and I are slowly disintegrating.

It is two o'clock in the dusky afternoon, the rain is pounding on the walls as though seeking entrance, the window reveals the universe filled with a gloomy element in consistency between sea and air, a mixture too wet to breathe, too sparse to float the ark in which Noah must somewhere be biding anxiously.

Max, abed, snores rhythmically through the downpour and sidepour and fainter gurgling splash from the eaves. From outside penetrates the wet-muffled whine and snarl of dogs quarreling over garbage: the dogs are hungrier than ever, for Andreus has been unsuccessful in the hunt since the beginning of the deluge. Now a single triumphant growl. Then there is silence, except for Max and the dull hammering of the rain. I am too restless to sleep or to work. I cannot stand being cooped up: I feel suffocated: I must go outside if I drown! Out I go, glaring, whip in hand.

It is a source of dissatisfaction that I am no longer a novice in cracking the whip, that I no longer lash myself on legs and arms and back, and clip pieces out of my ear. I wish I had something living to lash at.

After a while the exercise and surprise at my progress convert my fire to a more even glow of satisfaction. I certainly have "come along" since my first convulsive efforts three weeks ago. Handling an Eskimo dog whip is no child's play. Twenty-three feet of halfalive sealskin, treacherous as an eel, afford a feeling of mastery amounting almost to godhood when one is fully in control. Yes, sir, I'm getting pretty good.

I admire the instrument of my power. In my hand is the two-foot whipstock of tapering seal thong plaited for stiffness at the near end; attached is a sixteen-foot lash. The cracker, four feet in length, is a slender strip from the belly of the smaller fjord seal fastened to the long lash with a cut splice and a half-hitch combined, the whole greased with blubber to make the resemblance to the eel more striking. You twitch your wrist and the eel slave writhes in adulation at your feet. First a tremor running along the sixteen feet of lash, then a sudden erection of the distant cracker: snap!

Andreus, like other good Greenland hunters, handles the dog whip as though born to command it. He can flick a pebble off the ground twenty feet away. My own stiff wrist is still hard to control. I have been handling a whip only lately. Eskimo small boys play with toy-size whips as American small boys play with tops.

From her doorstep Andreus' mother watches silently. Whichever way I turn, I somehow cannot lose sight of that weird, outmoded topknot perched on her mangy-looking head. Andreus is probably sleeping. Ditto Axel. A faint sound of hammering indicates that Susan is busy on a small sledge model she is making. Weather is no obstacle to happy Susan—she can even carpenter without tools, driving nails with a stone, drawing them with her teeth.

Max is still sleeping, more quietly now. My glow of energy dies away. I realize that I am very wet, that I must change my clothes; and, having done so, I am content to sit quiet. There are to be many dull days, I must get used to them. My mind flounders help-lessly, trying to think back on something worth recalling; progress with the whip, and what else? Ah, that day I shot two ptarmigan!

Delicious, roasted, and seasoned with Andreus' awe at the fact that both birds were shot neatly through the head. It would have been a shame to admit that my superb marksmanship was sheer chance. Another day I flushed a flock of ptarmigan atop Observatory Hill: wary, unlike their careless southern brethren impossible to approach. They ran with heads cocked up, and took wing at my first step nearer. Once, over toward the coast, I saw a great wedge of birds flying south. Migrating geese at this extreme latitude?

Then, while laboriously translating some Danish one night, I learned from an account by C. H. Ryder that in 1887 he had left a cairn on the summit of Kekertarssuak Island. Kekertarssuak! Only a rifle shot away from Natsiorsiorfik here . . . Andreus and I located the cairn the next day. It was empty. The stones looked as though they had been laid the day before, and near by we came across the extremities of a base line used by him to measure the movement of Upernivik Glacier across the narrows. From the base line as one side of a triangle with the aid of a transit it is possible to measure the movement of the glacier by triangulation. I shall make use of the same base line later in my own glacial studies. It gives me a queerly uncertain feeling to contemplate working with the foundations laid down by the actual flesh-and-blood hands of a man heretofore a mere "character" in a book, though it be a "true" one.

How it pours—drives—pounds against our walls! A sea inverted upon this darkening northern world. Think if the fall rains had caught us still working on our house!

September 26: Snow. The only phenomena that we are interested in contain each four letters. Last night when the WIND died down, the RAIN changed to SNOW; this morning everything is covered with a deceptive soft mantle of white. No harsh rocks, the rainwater pools masked. At first we walked gingerly to avoid stepping into these lakelets, but now we wade apathetically through them all—it saves energy to plow through those in one's direct line of

progress, rather than to plunge into unsuspected others off to one side. No sign of a let-up on the snow.

It is the rule for Ewa or daughter Susan to scrub our floor every Friday or Saturday morning. When it is Susan's turn she dresess for the occasion. Today she appeared with her hair neatly plaited and wore a clean, many-colored *anorak*. We rewarded her efforts with some cigarettes and a piece of pilot bread. Susan is a pleasant young person to have about, full of energy and good spirits, eager to be of help, and willing to learn.

September 27: I have never seen a more cheerless wintry prospect. The weather is boisterous and cold; heavy snow blows past in clouds; behind the dull and overcast sky the craven sun is in hiding from the ominous aspect of all nature. These depressing days are suitable for deliberated murder. Like Melville's Ishmael, there is "damp, drizzly November in my soul."

September 28: The storm devils have relented! A beautiful day: its brightness cleanses my mind of the gray days past. It is a morning for Pippa's song. Max and I began making observations when the sun appeared at seven o'clock. With good weather to aid, Andreus has made a two-day trip by open water to Augpilartok, bringing a seal, shot en route. Even the dogs are gay. The cooling weather is reacting like a tonic. Max says he feels as full of life as though he had slept for a week. With the lengthening night both of us are getting more sleep.

When questioned about his trip, Andreus seemed ill at ease. He was anticipating winter sledging and the necessity of traveling between Augpilartok and Upernivik. I had known before that he was fearful of the sledge routes between Augpilartok and Upernivik without understanding why. Today he made all clear by saying that when he was a small child his father, whom he scarcely knew, had been drowned with his entire dog team on that same trail, the deceptive pack-ice surface undermined by shifting currents. When the surface breaks without warning sledgers are im-

mediately swept beneath the ice, there to remain until their bones are nibbled clean by fish. A Greenlander follows the route with the greatest reluctance.

I learned also that Ewa is mother neither of Axel nor of Susan. Susan's mother died when she was born, and Andreus, having a helpless baby on his hands, married again at once. Ewa fills the place of mother very capably; to all appearances Andreus' children so regard her.

September 29: Today we kayaked to Kekertarssuak Island for the second and possibly last time this year, to take pictures of the glacier debouching into Upernivik Icefjord. The air grew warmer as we approached. When we landed, we found that the sun beat so strongly upon the exposed rock that the radiated heat was almost unbearable. Water from melted snow ran in streams around boulders and ledges, although in shaded areas the snow was so dry that it crackled underfoot—one of the more treacherous of the Arctic's paradoxes. Along the south slope of the island and about forty feet above sea level our footsteps left intermittently a purplish trail. Once Andreus fell, staining his seat purple. This color phenomenon is due to the presence of extensive patches of "crowberries," which in summer grow profusely, and are so well preserved by the snow that they can be eaten, although the bushes themselves crumbled in our hands. Our advance was interrupted time and again by stops to clean the steam from our colored glasses. the glasses being necessitated by the glaring sun—that soon was to disappear from this portion of the earth entirely!

On the elevations we discovered numerous fox tracks, and beside an overhanging ledge a chewed antler, from which a blue fox fled at our approach. All young foxes of this species are blue, but toward winter some of the mature animals turn white. They are seldom hunted with rifles, which spoil the hides, but are caught in stone deadfalls and sometimes in steel traps also, where the trapper is able to visit his line regularly. The stone box traps are

set on solid rock along the shores of fjords and baited with fish or blubber. When the weight falls the fox cannot dig his way out, and dies of starvation. Other animals cannot get at the carcass, and of course the fox does not gnaw at his leg as when caught in a steel trap; with the result that deadfall pelts bring the highest prices from the government—twenty-five kroner (about seven dollars) for the finest blue phase, less for the inferior white phase.

Where foxes are plentiful—on Kekertarssuak they have apparently frightened off all ptarmigan—the natives have recourse to steel traps. These can be set out in a fraction of the time required to build a deadfall. The best locations are near meat caches, in which small openings are left to tempt the animals beyond the power of their caution to resist. November through January is the season productive of the choicest pelts, since before that the fur is not fully grown, and after that wear and semistarvation tend to mar it; but the growth of fox farms may some day make a revolution in this market and largely free the government from dependence upon such factors. Begun at Godhavn, Greenland fox farming is conducted with great care as to the selection and improvement of the breeding stock. Perhaps wild blue fox will become no more than a pest!

On our return from the island Max and I celebrated the opening date of the University at Ann Arbor with a feast. Roast ptarmigan deliciously browned by chef Max, corn, mashed potatoes, jam, cake, coffee, and schnapps made a meal that seemed to us far superior to what many restaurants offer. Condescending toasts were drunk to the "pale young men in our libraries"—for the moment we would have changed places with no one. Lacking a corkscrew to open the bottle of "Aquavit," we used a half-inch auger bit instead. This adaptation of a carpenter's tool reminded me of Dr. Hobbs on the expedition two years before. Our black bread then had been so hard that knives would not dent it, and the learned doctor had had to go gravely to work slicing it with a hack saw.

Our meals were not always so enjoyable. Sometimes, cooped up indoors without opportunity for exercise, we had small appetite, and eating then became a sullen duty. To make matters worse, labels indicating the content of cans had been rubbed off in transit. Shaking the can made powdered spinach sound for all the world like evaporated lemons. With our limited supplies we could hardly experiment opening cans without eating the contents. Even so, the lack of variety and the predominance of canned goods in our diet failed to blunt our interest in food—we had so few interests, and who could tell what an unlabeled can might contain? Yet eating fresh meat several successive days always improved our digestion and general health, not to mention nerves.

Andreus remembers us whenever he has a successful hunt. The scarcity of land game makes him indispensable, since he is able to pursue seals in his kayak: something neither Max nor I could do. Fresh auk meat is less rare than seal, auks being plentiful hereabouts. These birds fly in V-formation, five to twenty white-bellied individual wedges in each arm; slow flyers enough, yet able to survive, whereas their flightless penguinlike cousins the great auks dive no more.

When a flock settles on the water, some distance out from the shore, at least one bird is always in the air, scouting for fish a few feet above the surface. The slow wings sound curiously like the drone of an aeroplane propeller. At an instant's notice all the auks convert themselves into submarines, remaining submerged for minutes at a time when necessary. Pairs indulge in aquatic sports that consist largely of churning surprising quantities of water. A meal of clams and other packaged meats awaits them at the shore when they have worked up a sufficient appetite, and then, regrettably, destiny awaits them in the form of Andreus with a shotgun.

That same evening two kayakers appeared with mail from the coast. This was no free rural delivery, however: a twenty-kroner charge was made for their services. Mail included a message from

Dr. Hobbs, leader of the expeditions, concerning skins. Reindeer skins had been ordered for us from Alaska, and the shipment had at last arrived. We were glad to hear from Dr. Porsild, David Olsen, and Holger Ingeman, another Sarfanguak Greenlander. There was nothing from home, nor did we expect anything before spring, when the first boat arrives from Europe.

After the mailmen left I made a quick inventory of our stock of hams and bacon, which we are forced to hang outside for lack of space. A slab of bacon was missing. An Eskimos' reasoning in such matters is peculiar. He does not steal; he merely borrows without intention of returning. This is no mere sophism, however, for Greenlanders among themselves maintain a state of simple socialism, with every man responsible for the welfare of the group, and the group responsible for the welfare of every man-an arrangement necessitated by the meagerness of the traditional way of life. In practice, the natural improvidence of the majority places a severe burden on the energetic few. Presumably this tendency has been greatly aggravated by the introduction of food from the outside world. An Eskimo, viewing our stock of supplies, would tell himself that we had more than we needed; but Max and I saw no reason why we should hasten the corruption of Greenland selfsufficiency, and we resolved to keep a wary eye upon visitors.

September 30: So far have I advanced in handling the whip that today I began practicing with my left hand. Result: a painful back-slashing, and a sort of sneering condescension from that part of my mind which chose to associate itself with my more accomplished right hand.

Andreus, who came up during practice, notes the scarcity of polar bears in this region. Farther north they are abundant, and important to the Greenlander as a source of meat and fur. The polar bear is a powerful, rapid swimmer, able to overtake a seal, and should indeed be considered as essentially a sea animal, though on the ice it can outdistance the average native despite its lumber-

ing bulk. The sight of a bear occasions great excitement in Augpilartok. The whole village turns out for the chase, though only the more experienced hunters are in active pursuit. Dogs keep the angered beast at bay with a relentless courage that commonly leads to encounters with that great sweeping forearm, and which exposes them to the hunter's shot. The hunter who draws first blood gets the skin, which is sufficient for three pair of pants, while the meat is divided among the hunters. More often than not the bear escapes, because of its speed in the water.

Andreus was describing all this with a great deal of animation when I was startled by a tug on my whip, and turned ready to confront a polar bear. I was humiliated to see that a mischievous pup had just bitten my prized whip in two.

"Nalususuak," explained Andreus. The pup was a "know nothing" and would have to be educated. When it was over the poor dog must have learned its lesson. The punishment consisted in holding the head between his knees and pounding the forehead until blood ran from the nose. It sounds like a cruel method, but Andreus assured me that it was the only effective one known. When I asked him whether the dog would ever again chew a whip, he said only when detection was less probable.

October 1: It is Max's day with the chores, and I am permitted the luxury of late rising. To soften my bed I placed my skin sleeping bag under my Woods sleeping bag. Now I am so much elevated that there is constant danger of falling out, and another guard rail will have to be nailed along the side of my bunk.

It is a rare satisfaction to lie back and watch—or rather, listen to
—Max lighting the stove. The task is no easy one at this season.
The cold air in the stovepipe makes it difficult to induce an upward draft, weighing down on the air below and dousing the feeble first flames. Before an active draft can be secured the entire chimney must be full of warm air, as a siphon must be full of water to function. This morning Max has already taken thirty minutes. In

goes the kindling, out comes the kindling, in again; I lie snug abed, Max warms himself with exertion and bad language, and finally even the air in the pipes has been warmed and the stove begins to roar. Ho, hum! What is there for breakfast. Sea biscuits, jam, and coffee? (I'll have mine in bed, Max. What language!)

The early afternoon was devoted to skating on two ponds near our favorite lookout point. Max, wearing his just completed timiak, that Ewa had made for him, puffed badly after a few rounds, so stiff and heavy was the cumbersome caribou skin garment. Timiak discarded, he rejoiced in an exhilaration of movement unknown since our last train ride in Ontario. Ever since we had been becoming complete pedestrians. All motion had been so slow and laborious, this ease and speed came as new sensations; what an Eskimo might feel, given a "lift" in an automobile.

The ice was in excellent condition, but the foehn winds will soon cut the season short. Then, no more gliding about, with our long shadows precipitating themselves before us headlong, or lying on the ice behind, as though hooking ankles with us.

Auk meat, canned potatoes, and a cup of coffee were delicious. Our hunger satisfied, we did not overeat, but settled down to the contentment of an evening pipe beside the glowing fire. Outside, the snarling of the dogs like the snarling of the wind merely intensified our comfort and relaxation. Tonight, the fight might have begun over that bean can, containing no more than a smell maddening to dog prowlers. We cannot, like civilized people, boast a garbage dump, or anything suggesting an accumulation, for tins that happen not to appeal to some ever-present native the dogs carry away. The whole islet is slowly becoming littered. Max laments that the tin cans are "ruining our broad acres."

We talk about my proposed crossing of Greenland from Upernivik to Angmagssalik on the east coast. "The \$5,000 pipe dream," Max terms it; for it would cost that much to make the four months' trip with two Eskimos as helpers, owing to travel items to and from Greenland, wages for two Eskimo helpers, scientific equipment, dogs, and perhaps a year's delay on the east coast if the crossing were not completed until after the only boat had made its annual trip to Angmagssalik. The journey over the interior icecap would be made by dog team. Meteorological and aërological observations would have an important place in the scientific program. Soundings to determine the thickness of that great sheet of ice could be made. Careful measurements of the elevation of the icecap, its movement, and its surface characteristics would be welcome contributions. Unfortunately, the crossing will not get beyond the discussion stage this year: there is that expedition into the Devil's Thumb country to be made.

October 2: Andreus and Axel are again out on a prolonged hunt. October 3: This afternoon they returned, their kayaks in tandem, towing four seals—a banner catch. The seals had been discovered sunning themselves on the edge of the fjord ice near the glacier. One prize was a bearded seal nine feet three inches in length, with a girth of six feet four inches. In size the bearded seals are inferior only to the walrus among all their kindred.

Of the six species of Greenland seal, only two frequent these waters, the bearded and the ringed seal, which display a similar preference for the ice in the interior of fjords. The ringed seal is the chief object of the hunt, because its curiosity is stronger than its discretion and it is easily shot. Usually it appears alone in the deep water about glaciers. For air it scratches breathing holes through the ice until that becomes too thick, and then moves up along fissures and tide cracks. The young are brought forth on the surface of the ice in February and March. A bleaker place of birth and one contrasting more violently with human births in city hospitals is difficult to imagine.

The seal is the staff of life to the Greenlander. Without it, he would be unable to penetrate north of the timber line. It furnishes him with oil for light and heat, with meat to eat, and fur to keep

him warm. While Ewa and stepdaughter Susan were skinning and cutting up the catch, Max and I mounted guard. Max threw whatever came to hand at the blood-maddened dogs, and I wielded my whip. A few of the more courageous dogs attempted a rush from behind, and there was a tense moment before a well directed chunk of ice and smart cuts from my whip drove them back. But they never became discouraged until the task was done. The ringed seals had been slit down the front, and their hide peeled off like that of cattle; but the skins of the more valuable bearded species were cut into rings and slipped off, so as to make long thongs possible. Carefully prepared, these rings are used for kayaks, umiaks, sledge lashings, dog whips, and traces.

October 4: Max has unpacked our furs so that we may photograph each other in them. Struggling like a man getting into his first dress shirt, he managed at last to get the bulky timiak on—his first incautious move then split the back seam! The timiak must have been made for the needs of a tailor's dummy. However, we had not intended photographing each other's back; so the damage was not serious, except that Ewa must piece out the seam.

October 5: Two kayakers arrived this morning with a note from Dr. Rask in Upernivik. He proposes to get new tubes for our radio and requests one of ours for a sample.

A dull, overcast sky, one of many such, the sun appearing only in brief flashes through the grayness. The mild temperature enervating.

October 6: Just one more day.

October 7: RAIN! In October, along Arctic seas, more than a hundred miles north of Alaska's frozen northernmost point, where no Eskimo ventures! Boisterous weather is promised by the behavior of our latest foehn wind—it did not fail its ordinary course, and I fear we have not seen the last of it.

October 8: Whether Andreus is telling the truth or drawing upon his fertile Eskimo imagination is a question. As the tale does not

conform to Eskimo notions of humor, I am inclined to believe him. He relates how once in his native village Susan, who was working out of doors, saw a white whale come up for air not thirty yards away. Her excited shouts brought Andreus out in alarm. It happened that he was warm and had on no clothing-Greenlanders do not wear clothes except for warmth-and had stopped only to grab his cap and rifle and kamiks before dashing forth. But when he saw the miraculous sight of a year's supply dawdling practically at his door, he dashed to the water and plunged in neck-deep, half naked as he was, to get a closer shot. Andreus described the situation in such detail, and so forcibly how icy the water in the fjord was, how lucky that the white whale should have come close in where he, a good hunter, could get near it; how important it was not to miss, and what an undying fame it would give him; now and then going back to explain how he had dashed forth from his warm hut almost unclothed—all with such earnest gesticulation and vivid particularity, that it was not until afterwards that I realized that I had never learned the outcome. So, for me, Andreus is still standing there in icy water to his neck, boots on, and a cap, and a rifle sighting before his tense brown face, the creamy-white beluga whale squinting at him in astonishment.

The one thing that troubles me is that Greenlanders shun water like a proverbial cat. I hate to think of Andreus' great courage in overcoming this fear being wasted: I have not dared to ask whether he bagged the whale or not.

Chapter 12

OCTOBER MISCELLANY

OCTOBER 9: "Ewa was sick; she looked wan and spiritless. She clasped her head, groaning. 'Oh, niakordlugpok.'

"'Ead no good,' Andreus translated, 'much blow.'

"A bad head cold, eh? Well, the remarkable Americans would provide relief. I led poor Ewa and sympathetic Andreus into the house. With a sad smile, and whimpering softly, she accepted my professional ministrations—she seemed comforted already, when I mixed her a salt-water gargle. The average Osler would have stopped there. Not Dr. Demorest. I know the value of psychology in a desperate case. Ewa needed brightening up, so I added a few drops of mercurochrome for color. (You would never have thought of that, Bill.) When she left she seemed so much cheerier I wondered whether she thought the gargle was alcoholic: in any case, the curative powers of suggestion had been scientifically demonstrated."

I had not been present at the impromptu clinic, and when Max ended his recital contented myself with pointing out that when the district physician sees Ewa at Augpilartok next spring he will doubtless get all the details of the treatment.

"It will enlarge his ideas," ventured Max.

"And if Greenlanders generally begin demanding mercurochrome—"

Later in the day it became apparent that Andreus also is now suffering from a cold. Most likely the infection was brought by our postmen. The arrival of ships in spring always leads to an outbreak of colds and other diseases: for a time the ships' crews were held to be responsible; then it was observed that wherever mail was carried to outposts distant from the ports, the route was marked by a train of illnesses. Andreus says that for this reason the first mail of the year is seldom eagerly anticipated.

I learned likewise that Eskimo children escape the cycle of childhood ailments, and that white children born and reared in Greenland are similarly immune. But contact with arrivals from Europe at once affects all ages and races with the common diseases. Mr. Olsen, our Godhavn host, who is returning to Denmark next year with his wife and four children, expects a very painful period of readjustment to follow.

The government does everything in its power to prevent the introduction of diseases. Its trade monopoly is used to this end by keeping out foreign ships; and every arrival, Danish or alien, must pass a strict medical examination. There are seven medical officers in Greenland who are government-paid, and who make a survey of their districts at least once a year. Medicines and hospital treatment are free to all Greenlanders.

My own experience is that colds are invariably traceable to some outside source of infection, since moving in and out of quarters with changes in temperature up to one hundred degrees leaves no ill effects. During my year at Mt. Evans I suffered a cold but once. That was a severe one, contracted while nursing one of our Eskimos, who had caught it from Hassell and Cramer; for, though neither of the fliers was ill, they had just flown in from civilization. When I returned home that summer, most people were free of colds, but I had one after another.

October 10: An hour's hunt added two lean ptarmigan to our larder. After being aired two days, they will be parboiled in water containing baking soda and salt to improve the taste further. Fresh meat is particularly desirable at this time. The cold that has afflicted Andreus' family now includes Max among its victims. I alone have escaped.

October 11: I do not wonder that Max caught the infection. Daily Ewa fetches our kamiks for drying and reshaping, and today she returned one boot with sputum in it. When I called her attention to it, she assured me earnestly that this was iarpok and would not happen again: she would see to it that no one in the night used my convenient kamik for a cuspidor.

Despite Max's slight cold, he spends his days out of doors, and sleeps at night with the window open, though the temperature drops to zero. Essentially, we are both in excellent health.

While practicing with a whip today, I chatted with Andreus about my native friends farther south. He was curious to know more about them, but his questions gave me the feeling he was jealous. Our conversation turned to Upernivik natives. Andreus has always claimed that they stole some of the canned goods while we were in port there. As a subsequent inventory revealed nothing missing, this merely illustrates the strength which provincial prejudices can assume even among peoples of the same race and way of life. The Augpilartok Eskimo has a keen distrust of and dislike for the man of Upernivik, who in turn considers his hinterland neighbor to be an upstart. Last spring, Andreus says, when he was forced to paddle down to Upernivik for a rifle, he met with this typical instance of vicious behavior. (I give his account to show how slow Eskimo narration can be in coming to the point, as well as how able to ignore what conflicts with prejudice.)

Having beached his kayak on shore, as was customary, he encountered the assistant manager, a native, from whom he planned to make the purchase. "May I borrow your rifle?" Andreus asked the assistant. "Akigssaqangilanga (I have nothing to pay with). There might be seals in the water and one desires to hunt. One is a poor provider."

"Borrow my rifle?" the assistant said, laughing a little. "One wants to borrow my rifle!"

Pretending indifference, he turned away from Andreus.

"Yes, there are many seals. Many good hunters are certain one can get some," Andreus insisted. "I shall make sure of my aim. Perhaps one could pay for the rifle with skins. One has some very poor ones."

The assistant did not answer, but accepted the money Andreus produced. He brought out from the confines of his hut an old Remington and five cartridges too. A man who is in the government employ does not need to worry about meat for the winter and can afford to sell his rifle.

"A person who is a poor hunter does not need a rifle. Yes, here, take my rifle. I have pity for those who must look to others for help." It was evident that the assistant was a generous fellow.

The proud Andreus, fondling his newly acquired gun, returned to find that during his absence someone had intentionally trampled on his kayak, breaking the fragile frame in two. He was overcome with surprise and anger.

To injure a man's kayak is a deadly offense. Since it is his sole means of transportation and is indispensable to the hunt, it is as vital to him as was his horse to the rider of the western plains in former times. In Greenland, however, the equivalent of horse-thieving is unknown. The construction of the kayak represents so much labor and expense that Andreus still uses the injured craft, though its broken frame daily endangers his life. Some heavy sea may yet make that thoughtless Upernivik vandal his murderer.

October 12: Heavy snow has been falling all day in such large flakes as to obscure the farther shore of the fjord.

It is odd how abruptly one's feelings toward one's circumstances can terminate: a moment ago all this seemed too commonplace not to be wearisome; now I have become sharply aware of the essential strangeness of a world of snow, wind, glaciers, toppling icebergs which in rumbling over dash agitated waters against a shore of rock—aware of all the illimitable abstract forces of nature in their obscure war without beginning and without end, in which

man intrudes from time to time to engage in futile burrowing and die, or wanders elsewhere. I half wonder what I am doing here. How does it happen that I find myself in this corner of the universe where no film of human amenities and pretense conceals fundamental nature? I belong where there is vegetation, cities, villages, noise, action, color, warmth, where my contemporaries live and deny in chorus man's unimportance. This is too naked.

I rush out into the mathematic world of pelting six-sided crystals. For an hour and more I stand in the lee of a huge boulder, watching the endless downfall in a world where there is nothing but snow. Once a distant report indicates a new crevasse broken in the icecap. Snow, and snow, and snow; crystallizing in space beyond which fiery stars hurl themselves through frigid immensity; the snow falling in obedience to a profitless law with a sort of icy instinct to rush down like lemmings into the western sea.

In the house, Max is frying food. Something snaps. "Hello!" I say. "Ready soon? I'm starving!"

October 13: Patches of fresh ice appeared again on the fjord today, but soon were driven out of sight by a brisk foehn.

October 14: There is more ice on the fjord.

October 15: Andreus seldom visits us, but when he does he cleans his kamiks conscientiously, and unlike Ewa, who enters without warning, always knocks until bidden to come in. I have just given him an Eskimo periodical called Akuagagdluitit, presented to me by Nicolaisen when we were at Pröven. I was unable to make it out, but Andreus accepted the news magazine with great pleasure.

There is a printing press at Godhavn which publishes in addition to the Bible and Eskimo primers this monthly, founded in 1861, containing translations of novels and keeping the Greenlander informed on outside events, discoveries, scientific progress, and the like. Eskimos illustrate the paper, and Eskimo legends appear in it from time to time.

The written literature of Greenland is limited in content and variety. For a long time it was dependent upon Danish culture, but now it is assuming a national character. The first books, which were religious texts such as the Bible, were later supplemented by translations of Danish and foreign literature. As the population improved in reading proficiency there grew a demand for national subjects; and we have the beginning of an epoch in the cultural development of Greenlanders. Roughly speaking, this period began about one hundred years ago. In recent years, efforts have been made to provide a distinctly Greenlandic literature.

But the real literature of the country is found in the innumerable tales and legends with which the Eskimos pass the long night. When the sealers returned from the hunt, the kayakers from the fjords, and the sledgers from their journeys, after the meat and matak had been eaten, then would come the hours for story-telling. In the dim light of the blubber lamp the Greenlanders would revive the old tales. Some old man or woman who, through a peculiar aptness for reciting the legends, had become the bard of the village would tell the stories in a singsong, almost monotonous tone. These legends the listeners know and have heard many times; but repetition seems only to add to their appreciation. The Eskimo does not expect surprise or suspense in them, for the only variations are in details and ornamentation. Motif and dialogue remain always the same. Thus the interest of the story lies in the thrill of recognition, the reflection of their own existence, emotions, and experience—the tales serve to pass the time.

I have heard the same legends in Godhavn, Sarfanguak, Sarkard-lit, Augpilartok, Pröven, and in Andreus' own hut. During the past month Andreus repeated several times a number of them. Since the tales were never closely knit plots coming to a climax and could be, and in fact often were, continued indefinitely, there were portions which I did not understand. When I consulted the Danes in regard to their length and variability I learned that the

legends were a series of pictures, one succeeding another with little or no connection, and that details varied from village to village.

The contents of the legends cover a wide range. There are tales of animals, of intercourse between animals and humans, mythical beings and mythical places of heretic hunters and kayakers, subjugators of men and conquerors of women, and fights with the Norsemen. In them one finds frequently expression of the longings, ideas, the childlike fancies, and the workings of the Eskimo mind, often concentrated and poetic. A study of the legends furnishes opportunity for understanding the Eskimo, for it reveals his inner self.

I do not remember how the matter came up, but before leaving Andreus gave me a surprising item of information. Half a dozen Eskimos at Söndre Upernivik, an outpost sixty miles to the south of us, go in swimming regularly, summer and winter! Andreus finds them even more incredible than I do. He likens such strange persons to seals, and quite possibly believes that there is some uncanny kinship between the two. He himself dreads immersion.

Another item which stuck in my mind was that when a boy Andreus saw a big white man, beloved by the natives, at whose skill with kayak and dog team he still marvels. This was Peary.

October 21: Winter appears to have crossed the threshold. For five days it has snowed intermittently, and the drifts lie deep on every side. We plow knee-deep through them on our hasty runs to Observatory Hill for whatever observations are possible. It is nipping-cold.

Forced to stay much indoors, we devote ourselves to repairing instruments and equipment, work on the records, read in our library, write in our diaries, tend our stove, and pay more attention to what Max terms "our Art." That is, the culinary art. After much urging from my companion I essayed an apricot pie, which he pronounced delicious—Max, whose insatiable craving for such pastry could not be dulled in a month of snowy days, will stoop to anything.

October 22: The distant cry of an auk sounded so weird to me that I called Andreus' attention to it. He said that a similar call is used by Greenlanders for signaling, the hands brought to the mouth megaphone-wise and a series of short, sharp Ah's barked to fetch help. This may announce the capture of a narwhal, a white whale, or other unwieldy prize. If the exclamations come in rapid succession it is a sign that one of their number has overturned his kayak and drowned.

The distant call I hear, Andreus volunteered, might have been uttered by a quivitut—a "man-who-went-into-the-mountains." Like the call of the wild or the inclination to leap from high places, the quivitut's lure comes without warning. Usually the urge overtakes a native during the black winter. Melancholia, disappointment in love, lack of peace at home, or general unrest drives the man out into the night toward the fatal ice mountains. A few return cured; for most it is a weary form of suicide.

The dead are now themselves quivituts and seek to lure others to destruction, perhaps because lonely, and because their nature has become essentially evil. Invulnerable to human injury, the quivituts may be monstrous in size, or take wing. Andreus asserts that the sufferer is invested with these powers by the Devil, but it may be guessed that this is a recent integration of white man's beliefs. He does not believe in the quivitut: however, he declares that most natives live in constant dread of the call, and he himself has a wholesome respect for the Devil, whom an Upernivik Eskimo was reported recently to have battled, and overcome.

Andreus spoke with deep feeling of a tragedy that occurred near Upernivik two years before. An old man and his daughter were journeying there from Augpilartok for a holiday celebration. They were careful to choose the least treacherous route, the one least beset with dangers, but the following day another sledge traveling in the same direction came upon a hole in the ice. No sign of the old man, the dogs, or of the sled, was ever found. At the rim of the hole was the girl. She had frozen there, trying to

get out. Last year a similar accident resulted in the loss of another life. I do not wonder that Andreus dreads the prospect of covering the route several times this winter, as will be necessary to obtain supplies. These tragedies and the death of his father on the same trail must prey on his mind. It is only too likely that he will die thus, should he escape drowning because of the weakened frame of his kayak.

Max and I were interrupted at our evening meal by a clamor of barks, whines, angry Eskimo voices, and the sound of flailing clubs. When we hurried out, there was sufficient let-up for Ewa to shout her explanation above the din. Kopenok, the oldest of our dogs, and consequently one of the craftiest and most successful thieves, had broken loose from where he was tied to the hut and had ransacked the meat cache. I had thought the cache not only dog-proof, but nearly man-proof; it seems to have been no obstacle to the hungry veteran. Found with half a slab of bacon, he was pounded until the blood spurted from his nose and he was too groggy to stand. Some of the innocent pups who had inquisitively haunted the doorway likewise received a thorough beating to discourage their curiosity.

Kopenok and lead dog Takamuak are always kept on leash. When one escapes, an Eskimo riot squad immediately raids all meat caches; haste being necessary to minimize the possible loss. The mangled bacon was a welcome accession to Andreus' family and could well be spared, but Max and I resent the missing three auks, which were cleaned, skinned, and ready for the pot. Because of Kopenok we shall be eating sausage regularly for a week.

Chapter 13

ESKIMO AND DOG NEIGHBORS

CTOBER 23: Ewa and Susan spent over an hour here this evening poring over our old magazines. The thumbing was accomplished with much ah-ing and oh-ing, especially when they came across pictures of scantily dressed women. A men's garter advertisement brought a whoop of laughter, whereas the picture of a skyscraper failed to evoke any comment. There is no telling how long they might have stayed, for they left only when called for by Andreus, who appeared anxious for their safety.

October 24: I must have shown my astonishment at his manner. Ewa has just taken great pains to account for her husband's obvious concern last night. It seems that he knew she was visiting us, but was ignorant of Susan's whereabouts and feared that she might have fallen into the fjord on her way home from wherever she had been.

It is likely that what worries Andreus is the thought that we are taking too personal an interest in his womenfolk. If so, while this may be egoistic on his part, it is doubtless true that white men adapt their tastes to suit the occasion as frequently in Greenland as elsewhere. Andreus himself has related stories of such affairs. Two of the best hunters in the Thule District farther north are the illegitimate sons of an American explorer. Moreover, Danish officials are not reluctant to provide willing Eskimo girls such occasional favors as men like to bestow; and Greenland girls vie for the notoriety, distinction, and honor incident to their attentions. Andreus reports that in a near-by colony are eleven children whose father is a Dane. Years after he had apparently settled down with a

Danish wife, children bearing a remarkable resemblance to him were born. Neither the mothers nor the children made any claims upon a paternity which he chose not to recognize, though the children were vain of their predominance of white blood.

Judged by our standard, Andreus and his family do not stand high in regard to morals. Neither Andreus nor Ewa sees any virtue to constancy in a sexual sense just because they were wedded in a Christian ceremony. And it is only within recent years that girls of Susan's age have had any restrictions placed upon them. Andreus classes Ewa with other personal property (his dogs, sledge, gun, etc.), subject to similar disposal. If Ewa were unfaithful tonight, Andreus would inflict punishment, not for her moral lapse, but because she had allowed his property to be borrowed without his permission.

The life in close confinement without any outside entertainment, especially during the winter months, extenuates promiscuity among the natives. In former days a game called "putting out the lamps" was enjoyed in large communal houses. Visitors were invited to take part in the entertainment, which gave one an opportunity to embrace the nearest woman. Andreus does not remember ever having played the game.

In many places wives are exchanged for short or long periods as a matter of custom. Purely practical considerations are often the motivating factors in this exchange. If Ewa were incapable of making a long arduous journey to a distant hunting ground and it were necessary for Andreus to be accompanied by a seamstress, he would make a temporary exchange with a friend whose wife could be useful to him.

For neither Andreus nor Ewa is sex tabooed; and open discussion in the presence of Susan or Axel is a matter of course: neither of these two needs instruction; both have seen the act of procreation, both have observed the birth of children. Love making to Axel and Susan is not talking but acting.

Yet the Eskimo family is a closely knit unit, and despite temporary differences and occasional ill treatment, the relation between man and wife is a kindly and sympathetic one, while the children are cherished by both. Here as elsewhere, it is the civilized man that could emulate the savage to advantage. Parental affection seems to be reciprocated by the children. Susan, for instance, adores her father, and awaits his return with impatience whenever he is detained; her relations with her stepmother are exceptionally amiable. Nor are the aged and infirm neglected. Andreus' old mother lacks nothing in the way of physical comforts, and is treated as considerately and respectfully as though still a contributor to the welfare of the household.

Any uneasiness about Ewa or Susan on the part of Andreus as husband and father is not well founded with regard to Max and me. That four persons, Ewa, Susan, Max, and myself, so thrown together in isolation, should act as though unaware of difference in sex seems incredible, but such was the case. One need only to have seen Ewa or Susan to understand the innocence of our conduct.

More sinister is our economic relation. Although Andreus contracted to furnish his own food, money being advanced for that purpose, the improvidence of the European-influenced native is becoming apparent. Several trips have already been made to Augpilartok for supplies; yet his family is again short of coffee, its favorite drink, and he has asked rather complacently that we tide him over. They all know that we have plenty, and it is difficult to impress on them the length of time it must suffice us. I admonished Ewa sternly to watch her supply more carefully in the future, and gave her what she required.

Ewa roasts the coffee by raking it back and forth until black on a flat pan heated smoking-hot over a blubber lamp. The same pan is used by Andreus in making rifle bullets. The lead is melted, then poured into a stone mold, from which the shrinkage of cooling frees it. While the bullets are crude, they are much cheaper than

the manufactured ones, and are satisfactory for Andreus' gun: October 25: Kopenok had been rewarded for his thieving with a muzzle. The day he was punished Kopenok cowered whenever Andreus approached, yesterday he was less afraid; today he seems either to have forgotten the incident, or decided that it would not be tactful to remind Andreus—his manner is entirely as before!

King dog Takamuak was also muzzled, "just in case—" Takamuak is a veteran of many wars, as the absence of his ears testifies: wars against other dogs, and even an occasional bear. The entire pack pays devout homage to him. When he approaches, growling, the nearest subject rolls over on his back and lets out a pitiful, sycophantic whine; then the king passes on. Claw and fang are his emblems of command.

Takamuak is merely the leader of his clan. Their loyalty to their master—most Greenland dogs are not only gentle but affectionate and jealous of attention—does not exceed their fierce loyalty to one another. In a fight against other dogs the team is as one. The two dogs purchased by us at Augpilartok remain outcasts, seldom being allowed so much as to approach Andreus' hut.

These sled dogs are superb, shaggy creatures, weighing perhaps eighty to a hundred pounds, and so well protected by their woolly coats that even extreme temperatures do not bother them. They sleep in the open in the snow, curled up in a ball with eyes and nose buried in their bushy tails. To keep some of the older dogs from wandering off into the hills, Andreus hobbles one leg to the neck with a loop of twine. First one foot is tied, then the other, to prevent lameness. Crafty Takamuak and Kopenok know how to work a foot loose, hence the leashes.

Andreus holds that a team of six to eight is generally the most efficient. When we go into the Devil's Thumb country, however, he will break trail with a team of nine. And instead of proceeding single-file as in Alaska, the dogs will be harnessed fanwise; for, though the traces are more apt to tangle and though pulling



EWA

strength is lost because of the angle, this arrangement is best adapted to the dangerous ice conditions we must encounter. In fan hitch each dog picks his own way over the rough ice, so that at least one is always pulling the sled and it never comes to a full stop. In single file the lead dog breaking through the ice could lead only to disaster, for the other dogs and sledge would follow suit.

The principal business of the dogs when not on the trail is eating to build up the reserve strength that may be needed then, especially if food runs short. Eating is also their avocation. In summer they are seldom fed, and become so voracious that meat must be stored in caches built on skerries (small islands) offshore. Dogs in the Arctic dread water and will not swim even to satisfy their lust for food. That is, dogs less sage than the independent Takamuak, who has learned that because water is dreadful in winter it does not follow that it must be unpleasant in summer. Takamuak takes to the water like a seal, and gorged himself royally indeed until he was discovered in the act of rifling a meat cache. A further justification for the leash.

Feeding time never loses its fascination for me. The entire pack mills around the entrance to Andreus' hut tunnel, yelping, whining, clawing: all eager anticipation. From within comes Susan's voice asking that the coast be cleared. Whoever is outside now seizes a club and commences to beat out a cleared space, like a brutal policeman making way for a parade. The tunnel door slowly opens, and Susan emerges with a pail brimful of blood, meat, and blubber. The dogs whine, quivering with impatience. Suddenly a concerted attack is made, the clubber is bowled to one side, Susan empties the pail from overhead down into a tornado of frothing mouths, meat is snatched from atop bodies, from jaws: little reaches the ground. Susan is lucky to escape without being toppled over, only bloodied. Meanwhile a struggle begins for the fallen pieces. These seem the most coveted of all. Sixteen great dogs forming a circle with their heads for hub, snarl-growl-threat-

en-chew in one gasp, until the last morsel has disappeared and the smell alone is left on the ground, to be nosed over inch by inch, a horrible growl ready for any lesser hero collided with, lest the tantalizing odor be usurped.

Takamuak, having gulped the largest share and more besides, goes early apart to wash himself. He scrapes his reddened head along the harder crust, rolls his whole body in the snow, fastidious as a cat. His followers imitate him, spending ten minutes licking their own paws and those of their neighbors. In his favorite corner Takamuak spends a comfortable half-hour yawning and stretching, or chewing and growling reminiscently. The meal can be remembered for a long while. Then the dogs can think ahead about the next meal, seventy-two hours away. Or wander about looking for other morsels to be devoured—tar wrappings, seal thongs, boots, kayaks left unguarded, and umiaks not placed on their racks high out of reach.

Such is the dogs' life. An idle one, while waiting for active duty, yet not an unpleasant one. On the other hand, contagious distempers and hydrophobia often carry away whole teams, seriously handicapping the hunters, who must now seek to replace them by purchase of dogs from more fortunate neighbors for an average price of twenty kroner (about five dollars) each. This is made more difficult by a strict law forbidding importation and transfer from one district to another, to prevent spread of the distempers. It is believed carried by foxes, which often run mad. Wolves are practically unknown in west Greenland and cannot be the carriers.

October 26: Sunday, a day of rest from records. Although we made the usual observations we postpone working on Sunday records until Monday, to set the day apart. When the weather is good on Sundays we run up the Explorers Club flag. It is an emblem of worship, peace, and rest as it flutters in the breeze. It is our text of the day's losses and gains. The leisure on Sunday seems odd but comfortable—it is a semi-substitute for church.

We are having the highest air pressure to date: 30.27. Yet snow continues to descend from the overcast sky for the third successive day without interruption; not in flakes, but like crystalline dust. Vapor rises from the comparatively warm waters of the fjord and is blown in a fog across Natsiorsiorfik by the strong wind. The snow dust penetrates under one's very eyelids, the vapor suffocates one, the wind stabs. The weather has no right to be like this. From the barometer down all the indications are fair!

Max is now amusing himself by assembling the Christmas gifts he intends to present to our Eskimos—Ewa and Susan will be delighted with their far-reaching perfumes—the stronger the better, under the circumstances. Evil-smelling soaps, powders, candies, bright-colored trinkets, most excite the fancy of native women. I remember noticing while in Godhavn that the village belles lacked their characteristic pungence, having instead a substitute odor scarcely more gratifying. Was it due to a change in diet, or what? Finally Mr. Olsen enlightened me. Two weeks before, a Danish sailor, whether lacking self-confidence or overly ambitious it is impossible to say, had sought to ingratiate himself by presenting all of them with toilet water! What the outcome may have been "leads one to think."

Tobacco and clothing for Andreus, his mother, and Axel will complete Max's share of gifts. I have not yet chosen mine.

One of our better dogs, Angutalik, is sick. He suffers silently, head hung low, tail drooping. Nothing interests him. Yesterday he consumed the tar wrapper stripped from a ham.

October 27: Poor Angutalik suffers terribly at the sight of teammates devouring food for which he has not appetite.

October 28: Versatile Andreus has turned scholar: he has started to compile for us a brief dictionary of everyday Eskimo terms. By pooling our common knowledge of Danish, Eskimo, and English we are able to converse with very little difficulty, although recourse must sometimes be had to his eloquent language of gesture.

Andreus, like other Eskimos, is an excellent mimic. He is especially remarkable in his ability to imitate the gait of any man so that he may be recognized. I had not noticed the similarity between Axel's walk and that of one of the dogs until Andreus called it to my attention.

Andreus and Axel can repeat with almost perfect correctness each word in any sentence spoken to them, and they remember such words for a long time. Axel seems to prefer his scanty English and answers our Eskimo questions with replies in English. "Me thank you," "Yes, sir," "Good night," and "butter" are permanent in his vocabulary. If he drops anything, with our help on the word "fingers" he calls himself "butter fingers"! Susan is also accumulating phrases. "Thank you" and "You're welcome" are usually on her tongue, but frequently interchanged, as this afternoon. When I offered to get ice for drinking water, she said with genuine appreciation, "You're welcome!"

The Eskimo language is peculiar in that there are no classes of words or declensions. The word is built from bases or stems, affixes, and endings. Some of the few words that are built around the stem umiak, for instance, are:

umiakwomen's boat, skin boat umiatsiaklarge wooden boat umiarsuk.....small wooden boat (dory) umiarssuakship

All of the words are mainly of the nature of nouns; they are usually long and polysyllabic. One word can express an endless chain of ideas for which we should need several sentences. As an example, Andreus wrote out for me the word meaning "a stone used for tanning kamik skins": ersorsisigssaksiiorpigssaringnersiorsinangerkâ-kantime-âsît. Needless to say, the Eskimo speaks slowly because he needs to build his words as he is speaking. It is a delight to listen to an Eskimo talk, for the preponderance of vowels gives the language a remarkable richness in tone.

Several days ago I gave Axel a notebook in which to keep his diary. Under pressure, I prepared the following title page for him: "Diary of Axel Olsen—Experiences Among White Men." Today he asked to prepare his stint for it with our typewriter. The misspellings were victims only of phonetic injustice. Even so, it compared favorably with Mark Twain's facsimile of the original typewritten letter.

In addition to collecting meteorological data for the expedition I am trying, at the request of Professor Brees of Wittenberg College, Ohio, to gather facts and statistics about Eskimos who stutter! Young Axel listed for me the names of all persons in Augpilartok under the age of twenty, with notes on their speech. Not one stutters! I am unable to relate this to any psychological reason and believe this to be pure chance.

Axel added some not uninteresting information about inhabitants with other abnormalities. In Augpilartok there is a four-foot dwarf reputed to be, after Andreus, the best hunter and kayaker in the village. In Holsteinsborg is another dwarf who is master organizer and financier of that region. This worthy founded a girls' outing club, appointing himself treasurer for the dues regularly collected, and laying out money for picnics and outings from the funds in his care. The club flourished for years, and there was talk of building a modest clubhouse. When the dwarf's accounts were investigated to learn whether there had accumulated sufficient money, it was learned that the treasurer's accounts were kept only in his head! The club members were astonished by the discovery that they were even in his debt. It is thought that the ingenious financier made away with at least 300 kroner annually—a sum more than equivalent to the average Eskimo's earnings.

Axel further reports two victims of the dreaded kayak disease, a nervous complaint of the topophobia group, make their homes in Augpilartok. Neither one of the sufferers dares to go hunting in his kayak, and both have thus been forced to give up their chief

means of subsistence. Each of the hunters had been stricken when sitting waiting for seals in his kayak on a glassy sea in bright sunlight. The glare of the sun and the lack of movement brought on a form of paralysis—a spell that prevented the movement of a muscle. They were gripped with fear, until the spell was broken by a ripple of water created by a tipping berg. The one experience had been so profound, neither had again ventured to hunt from a kayak.

Mental derangement is not unknown among Eskimos; indeed, lacking reflective powers and having strong imaginations, they are susceptible to emotional strains. There are some neurasthenics, and epilepsy is quite prevalent.

This morning when I sat up in my bunk I was alarmed by a severe dizzy spell that almost sent me tumbling to the floor. A throbbing headache followed, which persisted on and off throughout the day. We have had no fresh meat in a week. This, perhaps also a cumulative dose of carbon monoxide from long confinement within doors, must be responsible. Until I came to Greenland I never quite appreciated the importance of fresh meat in the diet. Seal and an occasional bird suffice for the Eskimo; we, not being fond of seal, long for a little variety in our diet of meat—preferably, caribou, a delicacy much in demand here among Europeans. The desire for caribou meat can lead to embarrassing situations, as is shown by an incident that took place last summer.

Several Danish Geodetic Survey officers who had been making triangulations of the section were fêted at Pröven by resident Danes. Before going south on their return home, they were asked to be careful to purchase no more caribou than was required by their immediate needs, caribou being a necessity for the Danes who had to winter in Greenland. Nevertheless, when the officers stopped at Söndre Upernivik they outbid one another in purchasing the entire season's supply from the natives! Indignation ran high.

As early as 1886 Ryder, the Danish explorer who was the first to survey the Upernivik District, mentioned the scarcity of caribou and urged measures to prevent their extinction. They are fast disappearing. The introduction of the rifle into hunting has had the same effect upon them as upon the buffalo of the American West, where plains were once dark with herds. So great has the slaughter been at times that caribou meat in Greenland is a novelty. When caribou were more numerous they were shot merely to get the skin and tongue, the meat being left behind to rot. It is reported that as long as one hundred years ago 37,000 caribou were shot in Greenland annually. Finally a regulation was passed prohibiting hunting from May 20th to July 20th, except in cases of dire necessity. It remains to be seen whether this restriction is not too late.

The caribou is scarcely less valuable to the Eskimo than seal. The meat is eaten boiled in the customary manner; the fat is put to several uses, including that of cream for the coffee; the paunch is esteemed a great delicacy. The hide is converted into garments and sleeping bags; the antlers become instruments of the hunt more deadly than in life and harness rings for the dog sleds, while the sinews make a stout waterproof thread.

In Southern Sukkertoppen district where the ice-free belt is broad, conditions are favorable for the caribou. The most important deer hunt is just before the expiration of the open season, for at that time the deer are fat and the meat sweet, while the skins are in best condition for use as clothing. The Eskimos travel up fjords to the great hunting plateaus near the inland ice. They convert their umiaks into shelters—the women's boats are best adapted to carry cargo—and make their encampments near one of the lakes which are numerous in the neighborhood of the ice. In pairs, the hunters set out on their quest, carrying provisions sufficient only for a few days, though they may be absent for weeks, since they expect to live on what they kill.

Farther north, in spite of legal limitations, caribou hunting is carried on largely during the winter. Eskimos who hunt with dog teams maintain that the caribou, which are nearsighted, are confused by the upstanders of a sledge, mistaking them for the antlers of other animals. They have been known to come within easy shooting range of Eskimo encampments.

October 29: Dizzy spells recurrent.

October 30: They have persisted for three days now. I am able to eat very little. My gums are sore, and my teeth feel so much loosened that I am almost afraid to open my mouth to speak. Undoubtedly a dietary deficiency.

October 31: Today I am better, perhaps as a result of auk meat eaten yesterday. Minor ailments are a source of some worry to us, perhaps because of our isolation from medical care. No doubt much of my indisposition the last few days has been largely mental.

Max has baked a cake in our homemade oven of tin from packing cans. Very solemnly we stood beside the table while he performed the dedicatory operation of bisecting the cake: very good, incidentally. I was reminded by his seriousness of our Godhavn host, Mr. Olsen. "I will have some more cake!" declared Mr. Olsen, and then, anxious to improve his English, asked Max whether the wording was correct. Told that "May I . . ." would have been more polite, he retorted, "Yes, but it's my cake!"

November 1: A kayak message having informed us that the motor cruiser Saelen went south October 15th and would pay us a visit on the return trip, we anticipate it daily. This would be our first glimpse of Europeans in two months. Several times I climbed a hilltop affording a view of Baffin Bay, whence the Saelen would appear; the outlook is discouraging. Ice from the Upernivik ice fjord seems to be blocking all passages. The seascape is as dismal as our prospects for a visit. A wilderness of ice blocks, gray to white, pack the plain between dark rock shores under the leaden sky,

nowhere color. Even the familiar foehn, which might herd the ice across the straits to Baffin Land, has deserted us.

November 4: The days drift past like ice blocks on the slow current of the fjord. By tacit agreement we no longer discuss the Saelen, but cast about uncertainly for some other point upon which to fix our hopes, something by which we may calculate the progress of our drift. The sea of existence has frozen into uniformity. Crest and trough, optimism and fatigue, have been succeeded by a monotony of unbroken days. On our winter-locked island the howl of some despondent dog is the only sound.

I have been staring at the date of this entry. It seems to signify something. National election day! In America, so far south of Alaska, itself south of us, noisy millions of people at this very moment are actually agitating themselves about matters of politics and government! It is incredible. As though the United States were a fantasy, skeptically remembered. Surely the icy gray silent immensity of our northland is all the real world there is.

Election day. Why, we don't even know who the candidates are. Pluralizing old James Forsyte, "How should we know? Nobody ever tells us anything." Nobody from that half dreamed-of, half remembered other world, where loud cities flourish, so much as knows that we exist.

Chapter 14

TWILIGHT

OVEMBER 6: It is the end of the world. The air is full of shadow; all things wear a mantle of dusk in mourning for the dying sun. Over the chilled earth glaciers creep, ice armors the surface, snow falls and falls: the silence is of the dead; soon the cold moon will have a mate. Birthed in fire and violence, the aged planet expires in the grip of ice. We, the last survivors, stir ever less and less, moving in a numbed dream of mankind and universes. Finis approaches.

We live in a sea of twilight, all colors: purple, lavender, rose, and tints of blue. The sun has been obscured by clouds since October. In a few days it will cease to lurch over the horizon, and only a faint flush will mark the simultaneous sunrise and sunset. Then the flush too will disappear; our island will be left in darkness and gloom, to sleet and gales, until—incredible after the long night—there appears to the south a glow as though a fire had been kindled below the horizon, or like the mirage of some distant night city.

Meanwhile, in depression or forgetfulness, we have our duties. Though the balloons will have to be put away, instruments can be read by artificial light, preparations must be made for my trip, existence maintained. Moods pass, life goes on.

Today a bearded seal, the largest Andreus has killed, was brought in. His family was delighted with the size of the skin. The meat proved so rank that our culinary abilities are taxed to make it edible, for our palates are still fastidious. However, fresh meat is fresh meat, and we are gladdened by the sight of choicer cuts hung up to dry-freeze, even though they taste like ancient fish—which they have every right to.

For the dogs it has been carnival. Despite their enormous capacity and greater greed, they are compelled to leave luscious entrails lying about untouched; they merely eye this unprecedented plenty and gloat over their fullness. A few wandered over to our refuse heap, perhaps for the pleasure of being indifferent to its charms, and certainly they would have been embarrassed had any food been discoverable there.

Because their names are long and difficult to pronounce, yet confusingly alike, and because we feel an unconscious desire for company, we have decided to metamorphose the dogs into members of the University's geology, geography, and mineralogy staffs, thus:

Takamuak, the leader, became Professor Hobbs.

Kopenok, his brother, became Professor Kraus, et cetera.

We have tried to take into consideration each dog's position and rank in the team, its age, its disposition, and general appearance, so that the names are not distributed without forethought and suitability. The dogs are all good ones without a single shirker, all are manageable, agreeable to training and discipline, and not one is too voluble. We do not doubt that they will be a credit to their namesakes.

November 7: This has been a day of hard luck for me. Filling a balloon outdoors with one's bare hands at nine degrees above zero is a frigid amusement at best, but in order to enjoy it I had to climb Observatory Hill in the teeth of so stiff a gale that it took me fifteen minutes to make the ascent, instead of the usual three! Half frozen, I watched my balloon through the theodolite for twenty minutes. Then it burst. I picked up a second balloon, and that had a pinhole which prevented it from filling. As warm in my thoughts as I was cold of hand, I sent a third balloon aloft, and

after seventeen minutes of praising myself for persistence, I had the rare pleasure of seeing this one also shatter.

I went home.

Ewa was waiting for me with a request for sugar. She had asked Max after seeing me depart, but since there is a shortage of this commodity he had disappointingly referred her to me. Ewa probably considers me miserly, for I have had to refuse her often to prevent her from becoming too eager. Now and then she is unable to resist asking for some trifle—matches, needles, thread, nails, magazines, cards—but so far her impulses have been kept within bounds, and the infection has not spread to others in the family. Were we to encourage her it would lead inevitably to sore feelings following some too ambitious demand.

Precisely this threatened almost to disrupt our party two years ago, when the overly kind intentions of one member led a native to ask for a waterproof sleeping-bag cover. The native had been successful in getting a pair of shoes, raisins, pencils, a pilot balloon, some envelopes, several old magazines, and other odds and ends. When finally he had to be rebuffed, he showed his lack of pleasure in no uncertain manner. Eskimos are as easily spoiled as children. If a firm hand is not shown on occasion, they will continue to take advantage of indulgence and vacillation until it is too late to avoid giving serious offense by refusal. South Greenlanders are even more addicted to begging gifts than their cousins here in the north. More frequent contact with expeditions has perfected their annoying formula: nothing is too good or too poor to attract the admiring interest—"Pinivfarigpok!" (Beautiful!)—which usually precedes a request.

The word "formula" reminds me of how standardized our own conversation becomes in the absence of fresh stimuli. Max, tonight the cook, asks, "Tea or coffee?"

"Suit yourself," I reply nonchalantly, as I have replied to the same question at least a hundred times before.

"How was today's balloon run?"

"Followed it for twenty minutes. Only fair."

"What do the upper winds show?"

"Pretty quiet. From the west."

"By the way, when did Andreus feed the dogs last?"

"Yesterday, I believe. There was a terrible racket. Have a drink?"

"Did Susan get fresh ice today? The pail is getting low. Let me see, today is Sunday—the end of my week taking care of the stove."

"Don't rub it in—tomorrow is my turn to get up. Was Ewa around today?"

"I didn't see her. Boy, this place is getting dirty. Look at this corner."

"I think I covered up another draught."

The brilliant dialogue ceases when we devote ourselves to reading and writing reports. Presently I pull out my watch to see the time. "This is a damn good watch," I remark with surprise. We spend four or five minutes discussing the relative merits of our timepieces. At last I am inspired to shut him up with the old nursery rhyme, "To bed, to bed, you sleepyhead." And so it goes. Sometimes we catch ourselves at it. More often we accuse the other of "squirrel-caging" or say, "Mind the phonograph!" when he has played too long on the same note.

November 8: Daily now Ewa visits us to relate with epic monotony the wretchedness of being confined to her house. Her Augpilartok home was superior; it was larger; it had two windows; it had a wooden floor; and best of all, she could visit neighbors and be visited by them!

So regular has Ewa's lament become that we are scarcely conscious of it, and nod or comment sympathetically only when she has asked a direct question or permitted herself a longer than usual pause. Perhaps for her also the tale of woe becomes mechanical. In

any case, we often allow her to forget her homesickness in a copy of some illustrated magazine.

November 9: Neither Max nor I need ever be left in doubt as to the other's whereabouts. Greenland Grapevine Telegraph Co. attends to that, whether we are engaged in making observations, a survey, or far afield; night messages at no extra charge. When the snowing stopped last week, Max and I burst out like colts, dashed into the snowbanks for a long run across the island, and ended up with a wrestling match. When we paused to pant, we were embarrassed to see Axel gravely surveying us from a hill-top, and behind him another of the Company's devoted staff. After all, we are supposed to set the tone for Natsiorsiorfik society.

There is a saying in Godhavn, "If you wish to locate any Dane, ask the first Eskimo you meet." Of course the grapevine telegraph takes its toll. Although an Upernivik citizen may be able to gossip about happenings in far Julianehaab three hundred and sixty-five days after the event, the report is apt to be more than a little altered by the length and haste of its journey.

November 10: The same balloon ascension, meals, and all.

November 11: We worked on our records so late, for a change, we did not get into our sleeping bags until 12:30 in the morning. "The simple life indeed!"

November 12: Because of our absorption with work we had failed to notice that it was Armistice Day; a serious loss, holidays being for us occasion for celebration, whatever their nature. Max suggested that we create a Natsiorsiorfik Day-After-Armistice-Day special holiday, but I had a vision of where the logical pursuit of this plan would lead.

The Saelen has not taken advantage of the channel kept clear by the foehn for several days past. Heartened by the wind, we have resumed our lookout, our unavailing lookout. I survey the outer skerries and fjords through my glasses. The smallest visible speck I can picture as a ship, and Andreus, my frequent companion, is likewise able to stare steadily at some motionless dot and recognize it as slowly moving nearer. Sometimes we even exchange specks. Disillusioned at last, we shake our heads and return home saying that tomorrow surely the *Saelen* will come.

Still, it is better in a way to have a Saelen that does not come, than to have no Saelen at all. We are hard up for occupation. Every available hill has been measured as to altitude, the island's area has been computed by several methods, its map made. Even books have lost their hold for the time being.

The sameness of our days is aggravated by the monotony of the view of icy wastes in every direction, by the loss of distinctions between night and day, moonlight less faint than sunlight and the skies always dark, the earth in shadow, so that we seem to inhabit a cold limbo forgotten in space for eternity. Nor does the promised resurrection of the sun carry conviction to our emotions. It will be a relief when the night itself is upon us.

November 13: We have decided to name our lookout Mt. Disappointment. Max, who has manfully been striving to raise the morale of the expedition by a cheerful countenance, almost succeeds when amusing himself with a pair of three-week-old sleddog pups. His cooing baby talk addressed to the round little woolly bodies much diverts Ewa, who says that Max is like a doting mother fondling her first-born, and who amuses me in turn by imitating him behind his back. To Eskimos, our fondness for dogs is quite ridiculous. Dogs, like women, are beasts of burden; and while they should not be abused, demonstrations of affection are as much wasted on the one as on the other.

November 14: Ewa is more concerned about Max's attitude toward boots. He had brought with him a pair of Alaskan-made kamiks, worn by his friend Mr. Nayman more than twenty years ago. The kamiks are exceptionally fine, of neatly sewn caribou skin coming well above the knee; and at first they were the object of general admiration. But Ewa has grown jealous of them. She

discredits their warmth and durability (!) and urges Max to wear some of her own manufacture. When he broke a lashing today she brought out all the old arguments against imported *kamiks*, and consented to make a repair only upon being bribed with a cigarette.

Even Godhavn is suspect. Max wears an anorak sewn for him by a native of that place, and no sooner did Ewa learn this than with all the countrywoman's cynicism regarding city folk she began to hunt for defects. At last her search was rewarded by the triumphant discovery that one sleeve was an inch shorter than the other. "Now you wear my kamiks, Max," she asserted.

November 15: Resigned to the fact that we must face out the long winter night uncheered by communication with the outside world, we gave up our watch on Mt. Disappointment and tried, not very successfully, to busy ourselves. I was working on a Danish translation with Max when an uproar of dog voices drove me outside. There was the motor cruiser driving up the channel! I could not have been more astonished if it had been a railroad train. Was this artificial thing real? I had been gazing so long on an unbroken wilderness of ice that the Saelen had come to seem no more than a fancy with which a soul in limbo might seek to divert itself. Yes, it was real; no, mirage; yes, real—exultantly I tormented myself as the boat approached and the motor could be heard, a bow wave slushing off on either side—certainly a picture!

Someone on deck was waving a mittened hand. Dr. Rask! And that must be Bestyrer Lembke-Otto of Upernivik beside him. Now old Saugmann, our skipper friend, comes on deck. The even chug, chug begins to slow, the engine sputters, and stops. The little boat drops anchor abreast Andreus' house, and there at the land's edge the populace of Natsiorsiorfik waits to welcome visitors.

A skiff that was in tow is now pulled to the sloop, in step four people—the three whites with Dr. Rask standing and an Eskimo oarsman. Eager hands pull the skiff on dry land. "Welcome to Natsiorsiorfik."

"Greetings from Upernivik."

"In which house do you live, Bill?" asks Dr. Rask facetiously.

"Over there," Max answers for me with a note of pride in his voice.

"You haven't been losing weight," comments Saugmann. "Perhaps seal meat and Eskimos agree with you?"

The Bestyrer was well pleased with our arrangements. He had been somewhat worried, he said, over our welfare, but after seeing how comfortable we were his mind would henceforth be at ease.

As soon as we decently could, we begged time off to glance at our mail; letters that would be read again and again in the weeks to come, but which we could not put off looking at any longer. A golden argosy! Fourteen letters from home! Our first contact for months. Fourteen letters. Also, one each from Dr. Porsild, Dr. Poulsen, his woman secretary (as he calls his wife), and from Mr. and Mrs. Ejornes at Kutdlisat and Mr. and Mrs. Nicolaisen at Pröven. No "Ten Best Books" on a desert island for us!

The American mail was dated August 15—exactly three months ago—which probably accounts for the absence of anything from Ann Arbor, either letters or the skins promised by Dr. Hobbs. This last was very much of a disappointment, and it is fortunate that we were able to secure a few skins when in Godhavn. Without them I should have been so seriously inconvenienced as to have to abandon my winter ice trip.

Dr. Rask was anxious to repair our radio and had brought four tubes with him. But the tubes were of European make and did not fit; and as we have not the tools with which to make alterations, he must take the set back with him. It can be returned by kayak if he is successful in putting it into operation. Dr. Rask was upset by his mistake, and a little hurt by our lack of concern. We had to reassure him more than once that his efforts in our behalf were greatly appreciated.

Bestyrer Lembke-Otto had appointed himself our Santa Claus and overwhelmed us with a homemade cake, two cans of mock turtle soup, some peaches, apricots; and bottled Yuletide cheer including Aquavit, muscatel and four bottles of Gamle Carlsberg, which ought to insure us a very merry Christmas and a sad day after. However, we still have beverages from other friends left to cheer us on that occasion should there be need.

While our visitors gave us the exquisite pleasure of seeing friends sprawled where ordinarily there was nothing but emptiness or at best doleful Ewa, Max and I consecrated ourselves to preparing a meal that would do our feelings justice. I baked two pies for the occasion, Max ransacked our stores. The meal to which we finally sat down consisted of—

Fried seal steak
Roast ptarmigan
Roast auk
Potatoes and corn
Compote of canned fruit
Apricot pie
Liquor and cigars

Two hours were spent in eating, drinking, smoking, inquiries about friends, and in telling stories.

The Bestyrer was speaking: "'Virgin Mary,' as she was known, has been dead now for many years, but the natives of Augpilartok still cherish her memory. She got the name for having given birth to a child out of wedlock and without, according to her testimony, ever having been in bed with a man. The child almost died upon birth, but while it lived, it spoke itself to be Jesus reborn. He had come to help the poor Eskimos and during its short span of life gave numerous directions to his mother, i.e., she was to be paid an annual stipend by the governor, only English should be spoken in her presence, and everyone was to hold her in esteem and honor. Of course, she soon got into difficulties with the clergy, who eventually made her admit her blasphemy."

"Did the people of Augpilartok believe in her celestial Powers?" asked Max.

"Certainly! Many to this day speak about her with reverence. At one time the catechist [teacher] in Augpilartok essayed to act as her agent. He was roundly chastised for his gullibility and grew prematurely old."

"Did she ever marry?" questioned Dr. Rask.

"Yes, she did. However, the continuous stream of visitors who came to receive her blessing and sing hymns were too much for the poor man. He turned quivitut."

The story-telling was interrupted by Ewa, who brought Axel around to take advantage of Dr. Rask's presence. The poor fellow had been suffering greatly from two decayed teeth—so much that last week we had been obliged to call him in and volunteer to act as dentists. While I held a flashlight to his mouth, Max, using a small scalpel, cleared out the cavities and filled them with a patent preparation that solidifies immediately upon being moistened; Axel the whole time acting stoically indifferent: Not a gasp! Not a whimper! Not a complaint! The patient's jaw then was painted with mercurochrome to give his family visible proof that he had received treatment and was now all right. Unfortunately, he failed to cooperate by feeling more than slight relief.

Since Dr. Rask had brought no forceps with him, Axel and his father loaded their kayaks aboard the Saelen to ride out to Augpilartok, where the operation will take place. The necessary instruments are now available in most of the larger colonies. Tooth caries, which in Denmark are to be found in ninety-five out of every hundred people, in Greenland occur in one out of every two in the settlements and only in one out of every four in the outposts where the diet is not as Europeanized.

Ewa was disappointed with the arrangement and launched into a long recital of illnesses experienced, most synthetic, in the hope of being given a diverting supply of medicines. But Dr. Rask listened noncommittally; perhaps he will give Andreus a few pills tomorrow to bring back with him.

The Saelen had met with little difficulty in attaining our island, but for fear that new ice might obstruct the return the visitors left early in the afternoon. We could not conscientiously urge them to delay their departure. Still stimulated by the excitement, we returned the goodbyes shouted from on deck until the Saelen, which we shall not see again for months, finally disappeared behind an iceberg.

Even then Max and I were like schoolboys on Christmas morning as we fell to opening the boxes brought us. It was noticed for the first time that two evidently contained kerosene lamps; having struggled with the Danish bill of lading, we opened the smaller box. Beautiful to our eyes was the compact brass lamp, promising steady illumination through the long night in place of flickering candles. The larger lamp will be used mostly for reading and other close work; whereas, the smaller one will be excellent while cooking and performing the routine activities of our household that do not require good vision.

Letters from home, from Greenland friends, memories of the short visit were now constant reminders of our own isolation.

November 16: This morning I felt the glow on waking that holds on the morning after Christmas. I read and reread my letters, letters filled with warmth and affection, seasoned with local gossip. I felt as if I were near home.

Partly to tantalize myself, I am saving some packages containing magazines that came in the mail for reading at some future time. Susan's curiosity, however, exceeds mine, and I fear that in order to satisfy her I shall have to open them soon.

Weather clear, but no sign of Andreus and Axel. Ewa's impatience for the return of her husband knows no bounds. While baking a cake for us this afternoon she repeatedly ran out to look for his kayak. What is she going to do when I take Andreus north with me?

The cake, though not affected by these anxious excursions, encountered difficulties. Ewa had put so much dough in the unfamiliar bake tin that when it rose it completely filled the tiny oven. The look of tragic disappointment on her face would have turned to tears had not Max and I been unable to contain our laughter; heightened when Ewa herself did not know whether to laugh or cry. We hastened to assure her that producing such a cake was an exceptional feat. Finally she found relief in words, some of which we caught.

Iarpok! was stressed with every other word. Her explanation of the disaster was at first coherent but lost itself in its own labyrinth as it was extended. Iarpok! That American ingredients were iarpok! That a primus stove was iarpok, and that if we had an oven like hers in Augpilartok, used her type of dishes and Danish products, and many other things which we did not catch, she would prove to us beyond all doubt or question that she was a good cook and knew her business.

Almost in despair, we were inspired to eat portions of the fungoid mass; and so nobly did we devote ourselves to this task, that she left quite pleased with herself. I hope only that she has not been tempted to repeat her accidental formula.

Susan awaited her father with eagerness undistracted by personal mishaps, spending most of the freezing day on wind-swept Mt. Disappointment. Eskimo children early learn to imitate their elders' indifference to cold. Most of the day is spent outdoors when the weather is clear, in games which teach the skills with which they must be equipped in later life if they are to have a chance in their fierce struggle for mere existence: they paddle imaginary kayaks made of stones, dress imaginary skins, build miniature sod huts, and drive invisible dog teams before invisible sleds. The boys play they are hunters, and the girls occupy themselves with household activities. During good weather the children spend most of their time outdoors running in and out of the

houses. European toys have influenced play, particularly in recent years, but the commonest sight of a youngster at play is cracking a man's-size whip.

These activities are not all pure imitation, for the parents attempt to instruct their children in vital techniques. The father not only makes utilitarian toys for his son, but teaches him how to use them. The instruction ends when the boy becomes a man by killing his first seal.

The physical growth of adolescents in Greenland is slightly different from that of American children. The Greenland boy is smaller than his sister until he is sixteen years old, and the Greenland girl reaches a marriageable age earlier than her American sisters.

Naming the child has more important meanings than to indicate its genealogical descent. Among groups that have not come under the influence of Danish missionaries, much care is taken in selecting the name of some person newly dead, for along with the name the child assumes the qualities of its namesake. Unless the name is given to a child it must not be spoken, and the dead person is referred to evasively. Even Andreus and his family are reluctant to speak of themselves in the first person because of a traditional shyness of names.

November 17: The temperature has risen from 10.2 degrees yesterday morning to 30.1 degrees at noon today, the wind increased to a forty-five-mile gale—yet the barometer remains high! Driven to our scientific literature for a possible explanation, we found none. There is nothing in Greenland, even in Eskimo attitudes, so unreliable as weather, a fact that is very discouraging to expeditions seeking to pin down its vagaries.

One feature of the weather, however, has been remarkably consistent: the wind, which is entirely controlled by the inlandice circulatory system. To date, 80 per cent of the surface winds have come from an easterly quadrant. Balloon ascensions show

the same regularity. With few exceptions they show a surface wind constantly from the easterly quadrants, and these extend upward to a height of about 3,000 feet, where they are replaced by currents from the west which pass in over the ice.

The greatest contradictions have been in temperature variations. Although zero and below zero temperatures have been common, especially this month, yet a maximum temperature of 50 degrees above zero was recorded on September 10 and the temperature went up to 35 degrees on October 7. So far this month the temperature has not risen to the freezing point. The monthly average barometric pressure is dropping.

The sound of a shot from the direction of the fjord just sent Ewa and myself to the window. Three kayaks! With a heartfelt "Kujonok" (Thank goodness)—she rushed out before the last reverberations had died away, to greet her lord absent two and a half days. But instead of running to the landing spot with Max, Susan, and me she disappeared into her hut. Susan was unable to speak for joy or embarrassment, but she was remarkably constrained.

"Where is Ewa?" Andreus asked.

"She is in the house working," Susan, now in command of her voice, answered.

"Ewa, Ewa! What are you up to? Don't you see, Andreus tikipoq (has arrived)!"

After a minute Ewa hurried out of the tunnel entrance. "A person has work to do," she complained, hurrying toward our quarters.

It was to save Andreus embarrassment in front of us that she had acted so strangely. Moreover, she felt incapable of showing Andreus how happy she was.

After the initial excitement of the arrival, we were able to turn to the third kayak, which was paddled by Karl Peterson, an Eskimo who had helped build our house in September. Anxious for Andreus' safety in the rough water, where the weakness of his kayak's frame might lead to instant collapse, he had accompanied Augpilartok's most valued citizen twenty miles, and must cover the same distance alone when he returns tomorrow. Such thoughtfulness could not go unnoticed, so Max and I presented him with cigarettes and pipe tobacco.

Later in the day, Axel came running in with news of a walrus paddling in the fjord. It was the first seen here this year. From a distance the animal looked huge enough to be a whale. Andreus, at the time, was hunting on the far side of the island and did not hear the commotion. None of us felt sufficiently brave to give chase, so the season's biggest game got away unmolested.

The walrus is a valuable prize to the Greenlander, though dangerous to hunt above all others. A wounded beast will set an entire herd to charging the kayaker, and he must be skillful indeed to avoid being capsized or having his kayak gored and sunk. Even if he extricates himself he is likely to drown—few Eskimos can swim—or be torn to bits by the charging boulderlike beast.

It is much better to hunt a walrus from a larger boat. The harpoon used is actually a five-foot spear with a loose toggle head of a walrus or narwhal tusk armed with barbed iron blade. When the hurled weapon strikes the animal, the handle falls off, leaving the point attached by a sixty-foot seal thong to an inflated sealskin float, which enables the hunter to follow the wounded animal when submerged, and which prevents it from sinking when dead. Harpooning the walrus is only the beginning. The point has only penetrated the hide, and the killing must be done by a six-foot lance that is thrust into the beast's lungs and intestines. The lance must be thrown from short range, for if it does not kill the walrus the hunter must row close to the threshing beast to retrieve it for another trial. This takes skill and bravery. The work of towing the carcass ashore is a formidable task in itself. The kill may have been made miles from the land, and sometimes two kayaks in

tandem cannot move it faster than a fraction of a mile an hour.

Carving up a ton or more of walrus may take the better part of several hours, even when a half-dozen persons are engaged in the reeking work. Usually the walrus is beached during high tide and the butchering is done when the tide goes out. Every man who has participated in the hunt gets a share of the carcass. The original harpooner is entitled to the choice flipper, the heart, entrails, and the head.

November 18: Today is my birthday. This important occasion, for such Max would have it, was celebrated with a special birthday meal and toasts drunk to each other. My companion congratulated me ironically on still being alive and presented me with a volume of Kipling's complete works. For some absurd reason, I was excessively touched by his thoughtfulness.

Last year at this date I was thinking back on the year before, having no idea that I should again winter north of the Arctic Circle. Two years ago, my birthday had been celebrated by opening Fire Station Number 3 on Mt. Evans, an extinguisher being presented to me as a gift by Leon Schneider, our aërologist, who had just chanced upon it.

Ewa, too, remembered me on this occasion and brought me a pair of beautiful *kamiks* as a gift. Susan had a pair of mittens for me. Proud Andreus was delegated to make the presentation. This he did by dropping them inside the door and running. Susan and Ewa were acting according to our customs. Axel, Andreus, and his mother were true to Greenland form. The Eskimo gives his own birthday party, for it is up to him to make the neighbors take notice of the occasion.

Anniversaries are observed religiously even though among Eskimos time reckoning is not as systematic as ours. The method of telling time is unique. Eight twenty-five our way would be nine-five to them. They take the approaching hour and add the hour numeral nearest the minute hand. To the Eskimo, conse-

quently, any period is reckoned in terms of twelve hours and twelve minutes. Four thirty-five o'clock translated into the Eskimo would be five-seven. I had puzzled over this while we were building our hut. I had showed Andreus my watch, and he spoke the time to the others. One of us must be wrong, I reasoned, and again brought out my watch, only to have him repeat the first reading. I tried to tell him our method of telling time; but he did not understand, and at the time was no more successful in explaining his system to me. Max, today, came to my rescue.

To keep account of time fragments in the changeless north is an incongruity. Here, where the seasons are marked by the mere advance and retreat of ice, by the presence or absence of that frail god, the Sun, one may divide the year simply into Dawn, Daytime, Twilight, and Night. Not otherwise than this will time and nature appear when the slowed revolution of the earth marks the end of the world.

Chapter 15

OF RADIOS AND KINGS

OVEMBER 19: Ewa's expression the past few days has been as beseeching as that of a child fearing to ask for some trifle needed to make life worth while. What can it be? Does she wish permission to return home for a visit to her neighbors?

Our debate ended; tonight, Ewa could no longer contain herself. Shamefacedly, she pleaded for the loan—'just this one time, tomorrow somebody bring back'—of playing cards! Max has several never used decks, intended as Christmas gifts, and the proffer of one of these wreathed Ewa's round face in ecstatic smiles. Told that she might keep the cards, she gasped and launched forth into profuse thanks and a half-hour of explanation concerning her family's lack of pastimes and urgent need for diversion if they were not all to go quivitut.

Life for the Petersens on Natsiorsiorfik cannot be much worse than in Augpilartok where there is little to relieve the monotony. There, as well as here, each day is like its predecessor and there is only seasonal variety in existence. In Augpilartok, Andreus and his family, like the other natives, quietly observe Sundays and holidays, and only the appearance of a visitor is the sign for abandonment of all work and assembly of the villagers at some house selected by the newcomer. It is the exchanges of these visits, which are the real kernel of Eskimo social life, that Ewa claims to miss the most.

After Ewa concluded her lament and left, I wondered whether she would be back wanting to know why American cards are printed incorrectly—i.e. "Q" for the Danish "D" (Dame), "J" for "K" (Knight). Ewa and Andreus play a game not unlike our rummy, but Ewa prefers solitaire to the more social games. In Pröven, Nicolaisen told me that the natives have a game that is so complicated only a few Danes have been able to master it.

November 20: Our radio is in operation!

Today, two kayakers returned the repaired set with Dr. Rask's compliments, and in a little while we were listening to voices and music from the outside world! At the refreshing shock Max and I exchanged startled glances. For the first time we realized how introspective we have become, how preoccupied with ourselves and our bleak surroundings, so that beyond the ice dome nothing seemed real and emotionally we were unconvinced that life did exist. Now at the first strains of a dance tune the wall we had built about us crumbled. Again we were part of a thriving, pulsating earth—merely isolated in its least hospitable region.

We turned the dials this way and that, exulting in music and speeches and advertising talks and static with fine indiscrimination. What we wanted was to renew contact with our past and our future, no matter by what strand. For an hour and more we had not even the presence of mind to sit down. Grinning apishly at each other, we rejoiced in an amorous description of a child's breakfast cereal: the very inanity of it made the picture seem more real.

The price paid the kayakers for delivering the radio ceased to exasperate. Forty kroner per man might seem exorbitant—Andreus says that pay has doubled in the past two years and that Eskimos refuse to venture alone on long journeys—but the comfort gained is beyond price.

The story behind the quadrupling the price for the Eskimo Express, as Max calls it, is suggestive. Two years ago an Upernivik Eskimo was dispatched with mail to Pröven. Little concern was felt when he failed to appear at the expected time, arrivals being uncertain, as is everything else in this country. By mere chance, two days later bits of clothing and the naked framework of a kayak were found on a small island near Pröven. It was believed that heavy seas had led the carrier to seek rest there. Perhaps while dragging his sealskin-covered kayak up on to the beach he had slipped and fallen. In any case, the dog teams kept on the island had fed well.

Although a similar story, of the death of a young white woman at the jaws of her own much-petted sled dogs, was related to us aboard the *Beothic* by a Canadian Royal Mounty shipmate, it is difficult except at feeding time to imagine *our* noble-looking animals capable of such savagery.

November 21: Lately the Andreus Petersens have been neglecting to dress up on Sunday. Greenlanders usually are very careful in this respect, and I fear that a lapse is due to the bad influence of the Expedition: Max and I lounge around in our spotted woolen garments precisely as on other days.

November 22: Not only do we set the style in clothes for Natsiorsiorfik society; involuntarily we are becoming the decorators of Andreus' dream home. With the money earned this winter he plans to build himself a fine new frame house along Danish lines, the interior to be tastefully adorned with illustrations and advertisements—brightly colored by preference—cut from magazines donated by us. We brought a good supply: the house will be the envy of the Petersens' friends.

November 23: Max and I are becoming choicer in the selection of radio programs—he prefers lectures, I like good music—we compromise by agreeing that the reception is terrible.

November 24: Ewa has ventured to bake another cake. This time she ladled dough into the tin with all the restraint and hesitation of a man planning to use dynamite near home. The suspense and heat were more than this mortal could bear, but Ewa's wet, shiny face beamed over the oven a picture of contentment, while

I longed for a house less well insulated on bake days. Thus far, indoor heat has bothered us more than cold outdoors.

November 25: Snow and gales, a flood of glass-sharp crystals leaping upon us with a carnivorous howl of wind. We had been tricked by recent good weather into leaving tools and equipment in any place convenient for use the next day. Now we must dig them out of drifts. The anger of the wind raised our own: we move alert for combat, eyes hard. In the semidarkness it is impossible to judge the thickness of the snow blanket. A step may sink one foot in snow, or six; a precipice will look the same. We return cold and white, and fearful that our accumulated anger will flash out at any object offering relief to the excess potential.

November 26: Andreus eagerly accepted our invitation to listen to the radio with us tonight. What a strain it must have been to all the Petersens to hear strange voices coming from our house, yet know nothing about it! Not often are people in Greenland, either Dane or Eskimo, so punctual—or so neat. Andreus came with hands and face washed, hair combed, a clean anorak for the occasion; in every respect a presentable guest, save for his forty years' development of characteristic Eskimo odor.

Without waiting for an invitation he seated himself on a box that serves as a chair. I made ready to place the earphones on his head, all the while watching his reactions. As I turned the dials from one program to another, his face remained expressionless; only when we came across some negro spirituals was there any display of emotion. Then Andreus gave way to his emotions, swaying his body and tapping vigorously with both feet.

Andreus has a keen sense of perception and understanding when he can actually see what it is that causes some phenomenon. While hunting seals, he is keenly aware of everything about him: the drift of his kayak, the location and movement of drift ice, the direction and velocity of the wind and every little detail in his environment that might have some bearing upon his success. However, in our camp he has no appreciation whatsoever of our technical equipment, for he is unable to visualize the use to which it is put. A pencil sharpener, nevertheless, not only attracts his eye but appeals to his imagination because he can actually see what happens to a pencil when it is placed inside and the handle is turned. A phonograph also has more meaning than a radio to him because of the necessity for a certain amount of manipulation; and each disk obviously produces a different tune. Danes report that natives who are taken to Denmark apparently lose all sense of perception because of a new environment.

Our running chatter must have served to confuse Andreus even more. He, like other natives, has difficulty in rationalizing two contradictory or even parallel thoughts, and is unable to draw reasonable comparisons. One day I questioned Andreus about sealing prospects to the north of Natsiorsiorfik and raised the question of whether it would be advisable to reach them by traveling over ice or directly over the hills. He was unable to give a definite answer, I suppose because he could not think of the two possibilities at the same time. His consideration of the path over the hills precluded any thought of weighing its advantages and disadvantages over the other route. Probably most of his thinking is accomplished in his "unconscious," so familiar have these matters become.

With some encouragement from us Andreus, having left the air thick enough to be sliced, decided to leave. "Kujonok" was his only remark.

"Phew! That was an experience!" exclaimed Max. "Don't you think we're pretty good teachers of radio?"

"At least he won't think what the Godhavn natives did when a broadcasting station was established there. The seals happened to migrate from the vicinity at the same time, so radio was blamed. They reasoned that if a man could talk into the air and be heard at Julianehaab four hundred miles south, why shouldn't seals right in the neighborhood be able to take the hint?"

"Maybe it kept the seals awake nights—"

November 27: Thanksgiving Day rain—just like home. Back there the rain is beating on leafless trees and churning the earth to mud; roads are shiny with wet, and people guard their umbrellas nervously. The downpour here turns the snow into a sea of slush. Pickles (our last jar, saved for the occasion, hence its position of importance), corn, ham, pilot bread, jam, coffee, spelled Thanksgiving dinner. The rain clouds had blown away at noon, but the temperature remained high-35.1 degrees Fahrenheit! How many residents of Michigan are enjoying such mild weather? Perhaps it is hailing there, two thousand miles south of us! Certainly few of them can be as healthy and active as we, and our being here is after all a privilege eagerly sought for and gloated over when gained; we have many good friends thinking of us at home and here in Greenland, also our faithful Eskimo retainers; we are comfortably lodged with plenty to eat and not too much to do; our work is to our liking, our scientific equipment good; we can pride ourselves on a fine dog pack with a truly great leader in Takamuak, who some day may have to be thanked for saving my life and Andreus' where a lesser dog might fail-nothing essential is lacking. The days are depressingly dark, but neither of us has the slightest inclination to jump into the fjord or run quivitut. Yes, we have a great deal to be thankful for. Everything has gone very well.

November 28: Andreus, Susan, and Ewa having heard our radio, tonight it is Axel's turn. He came like the others, exactly on time, and outwardly as clean as could be expected of an adolescent. But the visiting manners of the others were absent in his case. When given a cigar he bit off the end and spat it on the floor—his father had carefully deposited the tip in the stove; and it is evident from many small acts that he has no notion of politeness, that special behavior that continentals reserve for such time as they are away from home. Unconsciously, he is more honest than the rest of us.

Axel reacted nearly as enthusiastically to radio reception as did his predecessors. He enjoyed himself so much and stayed so long that the charged air became too much for us; and it was fortunate that the radio suddenly happened to go bad. (Perhaps the air affected it, for after we had revived ourselves outside following his departure, and had aired our home for half an hour with door and window wide, we turned it on again quietly as good as ever.)

November 29: We are awaiting the Arctic broadcast from station KDKA in Pittsburgh. It is one o'clock at night.

All day it snowed heavily, and all day I thought of Mary Jane, Snib, John, Mother and all who might send word that they are well and remember me—it is strange how personal and reassuring such a message can seem, more even than a letter.

Now the hour has come. At any moment the spoken kindness may flash from KDKA's towers over sleeping Canada, over Davis Strait where churning ice gleams palely under the stars, express to Natsiorsiorfik, where Max and I huddle avoiding each other's eyes.

"This is station KDKA in Pittsburgh broadcasting messages to the far north. Please stand by."

We freeze in position, afraid to lose a word. "At the sound of the musical note it will be exactly fifteen seconds past eleven o'clock, Eastern Standard Time. [Bong!] Before reading the many messages we have for our friends in the Arctic we will have a musical introduction. The Royal Fusilier Band will play 'Hail the King.' This is a Victor recording. One moment, please." Music. "We have some Rugby League scores for you. In the old country Liverpool Stanleys defeated Keighley 5-0. That puts Liverpool on the top in league standings. In other games during the week . . . Our first message is for Dr. Bruce at Chesterfield; this is from Jim: Everyone is well and wishes you a mild winter." More phonograph music. More scores. Weather reports. News events. "A message for Corporal Stallworthy in Ellesmere Land: All is well . . . Signed . . . Mountie Boulieu, a message from home

... "What about Max? What about me? Phonograph music. Scores. News. Weather. "Father La Voie, a message from ...

At three o'clock I yawn casually. "No news is good news," I tell my companion. He does not answer. It is his first experience of the kind.

November 30: I had just completed yesterday's entry in my journal when there was a knock. Andreus' face was strained.

"What's wrong?"

He shook his head and beckoned me to follow.

Takamuak, the king, is ill. We find him in his nest alongside a boulder where he has lain unmoving all day. With difficulty he opens his eyes; he is too weak to growl. The powerful, warlike leader, bulky in his thick fur, is more helpless than a naked newborn puppy.

Susan unwittingly had given Takamuak the head of a fjord seal. He, Andreus, throws every head he gets out into the water beyond reach of the dogs; it is hard to understand how Susan could be so careless. What there is about seal heads that makes them injurious we do not know for sure. Perhaps the stiff whiskers, like tiger whiskers chipped fine as an African instrument of revenge, penetrate the stomach or intestinal linings, causing hemorrhage. The prospects for recovery seem poor. Andreus and I may have to make our dangerous trip without the sage leader.

Later in the evening Max and I went out to rig up a counterpoise for the radio aerial. With the low wire pulled taut we prepared to return, but spied something dangling on it like a child's kite on a telegraph wire. There was furry Mr. Belknap (Nuikititsok), fore toes and hind claws barely touching ground on either side, arched forlornly over the counterpoise, looking very foolish. His surprise at having the wire drawn up tight under where he was standing must have been great, for not a yelp had he uttered. Now, when we burst out laughing at him, he gave us a reproachful look, and even after we had collapsed the "tight-rope" under him, he sulked off with an air of injury.

December 1: The king is dead—we hardly had the heart to cry, Long live the king! Takamuak, matchless team leader, dreaded veteran of many a bloody struggle with dog and bear, ingenious alike on the march, in his rule, and in his search for food, almost a canine genius all things considered, was found stiff frozen this morning, the victim of his appetite. Many seals had he killed and eaten; it remained for a dead seal to destroy him.

All Augpilartok will rejoice at the news, not alone cowering dogs, but even villagers, for Takamuak feared to grapple with neither man nor heast where his dislike was aroused. The Petersens do mourn him, but as a valuable property lost; a sled dog unerring in his detection of good and unsafe ice; a tireless hunter able to detect bears at great distances; in the traces a leader without peer, maintaining perfect discipline in his followers, relishing work, obedient to command and unswervingly loyal to his master, for whom he showed a rude affection. There was something about this superbly confident hundredweight of black-and-gray-furred muscle that commanded instant respect. I was attracted to the old thunderer even when, as I foolishly tried the first time to pet him, he snapped dangerously. What need had he for tenderness? Later, he gave me a grudging acceptance, and as I continued to make every effort to win favor, we were becoming almost friends-a victory indeed over the surly old warrior. To me, and to Max, the passing of "Old Tak" had in it something of personal tragedy.

But who will become the new leader of the team? Andreus believes that Kraus, little brother of Takamuak, will assume the responsibility. We are anxious that the battles for kingship end before we begin active sledging in January. Already there has been much fur flying with Kraus asserting his superiority.

December 2: Takamuak was buried under a mound of snow. Not respect dictated this treatment, however, but Ewa's conviction that after a winter on the frozen carcass the fur would be improved and better worth skinning. During the night some of

Takamuak's former subjects took vengeful nips at the body, and today Andreus dragged it like the corpse of Hector farther from camp, where it is less likely to be molested.

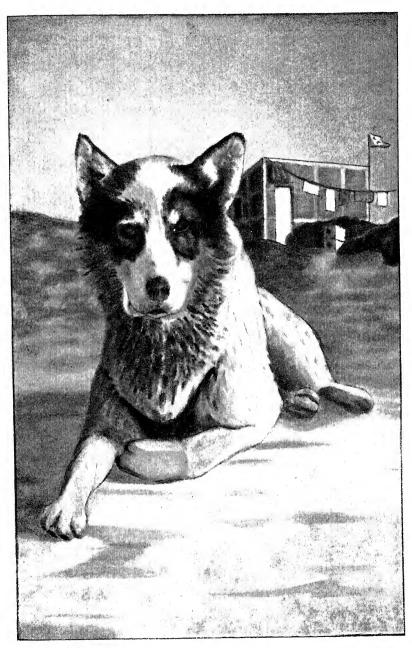
For a week Ewa has been imploring permission to wash our storage shelves. She must learn what is on them, at any cost! Today, when I cravenly granted permission, she stretched out the fifteen-minute task for two solid hours, puttering among the packages and jars and plaguing Max with questions as to the contents of each, I being outside at the time. Finally she put Max up to speaking to me about a gift of pepper. This he did by suggesting to her in my presence that she ask me for what she wanted. Ewa was properly mortified, and to add to her vexation, Susan, who had been washing clothes for us, spoke up and said that she was "bad for begging." Ewa's defense was a rambling story about the efficacy of pepper to cure stomach disorders! I gave her some, but in so indifferent a manner that for a few days at least it is safe to assume that she is cured.

Tonight for the first time I slept cold. Until now my Woods bag afforded plenty of protection. With the lowering temperatures I shall need more covering.

December 3: One of our best looking pups looked very woebegone this morning, dragging himself along as though his spine were broken. I called Ewa's attention to the sufferer and asked whether it would not be better to take him into the house. She replied that the dog was merely cold, and that it did him good—i.e., toughened him—to suffer a little.

Later she came to tell us that James was dead. Andreus declared that the spine was broken, she said, laughing as at a joke. We gave her to understand that we saw no humor; we liked James, and his death will handicap her husband and myself when we start north.

December 4: It seems that the death of James was "greatly exaggerated." When I went out this morning, there was the pup to greet me with joyful tail wagging and eager tongue. Apparently



TAKAMUAK

he had heard nothing of his reported demise. Ewa explained that the dog, still rather weak, had appeared to be so near the end that she considered him as good as gone. Can her whole account have been a malicious attempt at revenging herself on us for the pepper episode?

However indifferent to the welfare of animals, Ewa continues solicitous of our comfort. We had been hunting high and low throughout the house for an unfamiliar stink that haunted us, and though we discovered many odorous articles—kamiks, skin trousers, rancid butter, which is the only kind we have to eat—the aggressive object of our search remained hidden. Then Ewa came to the rescue, pointing an accusing stubby finger at a twenty-pound sack of flour. Sure enough, the flour proved moldy and had to be thrown out; whereupon Ewa proposed to stuff the sack with down filler to make a pillow for me.

A complete survey of foodstuffs revealed that nothing else had spoiled. To guard against the insidious Arctic moisture we had left a three-inch space between the wall and all boxes, and this has served very well to protect them.

Andreus tells me that he was spared the trouble of drowning a litter of puppies that came last night. The other dogs, led by the oldest bitch on the team, were on hand to dispatch them, and the disabled mother had been too busy trying to keep from freezing to give tongue in protest. Thus the pack saw to it that there would be no more mouths with which to share food in the months to come. Andreus apologized for the fact that in his present temporary hut there is not room to take an expectant bitch indoors for protection, as is customary. Trading and killing are the principal Eskimo methods in controlling number of dogs.

We shall have to be very careful of our dogs during the next few weeks, for the success of our journey north depends upon them. More than five hundred miles of both sea and ice and mountainous territory will have to be covered, with the minimum quantity of equipment and food, traveling and camping under the light of the stars and sometimes the moon, exposed to forty degrees below zero cold and perhaps hundred-mile-an-hour winds—weakness or disobedience in the team might spell disaster.

Our original destination was Nugssuak Peninsula, but Andreus advised continuing the trip thirty miles farther to that promontory in Melville Bay the name of which he described graphically by saying "Bad man!" displaying his thumb, and stamping the ground as though he had the Devil in person under his heel. For the Devil is not feared by Greenlanders as an evil spirit or an enemy of souls. The Greenland version of the Evil One manifests itself as a physically dangerous large dog, bird, or other familiar natural object, with which some Eskimos claim to have come to blows. Presumably they did not have the worst of the encounter with the Devil, or delicacy would forbid them to touch upon the topic.

Andreus told me about an imaginative Upernivik friend who, out hunting in his kayak, saw what appeared to be a ringed seal. He shot and hastened to attach a float to the stricken animal, when he realized he had shot the Devil, for it sank with the rattling of chains.

On one occasion, when his family was on a berry-picking expedition in the hills, Andreus had been left alone in Augpilartok. Late at night he heard a rustling outside, but paid no attention to it. He yelled once or twice. The noise continued. Again he yelled. Still it persisted. What could it be? Finally, it dawned upon Andreus that a neighbor's wife who had shown some interest in him was doing some clandestine flirting. This, of course, was highly flattering, so he pulled on his trousers and stepped outside to invite her in. Who should confront him but the Devil! For fifteen minutes he wrestled valiantly to get out of his grasp when pht! the Devil turned into a rain barrel!

In Greenland people who are mentally unbalanced are often

accused of being possessed of a devil. There have been instances in which persons with delirious fits have been allowed to starve, and then buried outside the confines of a village cemetery.

December 5: Kraus has emerged as the new team leader, as Andreus predicted! Now it is to him that the others give way, fawning and whining, though I imagine a difference is detectable in the reality of their fear. Who will be the first to challenge Kraus? The mottled gray and black dog has appropriated old Tak's favorite bitch, and with harem inconstancy she reciprocates his affection.

Meanwhile the rabble discovered Takamuak's body and devoured it skin and all. Did they take revengeful delight in wreaking their inferiority on their former tyrant? It is of course inconceivable that any trace should be present in their minds of that belief which has led many savage races to practice ritual eating of their dead ruler in order to immortalize his god-virtues. None the less, brave Takamuak goes north with us, if not in spirit, at least in bodies; and may they partake of his strength and indomitable will!

December 6: A piece of watermelon pickle given Ewa was treated with the utmost curiosity, and scrupulously divided into five equal parts. Nothing seems too small to be divided: last week a piece of pilot bread was shared around.

Ewa has again reminded me of my promise to send her a shipment of magazines and some enlargements of family snapshots when Max and I leave for home. I believe that dream house at Augpilartok occupies her mind more continually than with Andreus himself.

Andreus has displayed such persistence and skill in keeping us provided with fresh meat that today we rewarded him with a finger of schnapps as bonus. He downed the fiery liquor eagerly. Alcohol is a rare treat to the Eskimo, for the Danish government is strict in regulating its sale, allowing little to native officials and none at all to the rest of the population. The Augpilartok Village Manager gives Andreus a little on occasion, and Danes may sometimes have treated him to a drink following some difficult task or long exposure to cold, but apart from that he has no way of obtaining alcohol. America's tragic experience with demoralized Indians will not be repeated here.

It is far otherwise with Greenland Danes, some of whom imbibe freely to combat the climate and depression. They marveled at our temperance upon learning that we had, despite governmental license, brought no liquor of any kind, and have repeatedly offered us gallons. Probably at this very moment friends to the south of us are drowning the memory of our refusal in schnapps.

While Max split kindling, I sauntered off for an afternoon stroll over the island's hills. The crisp snow crackled pleasantly underfoot. It was very quiet. As I neared Mt. Disappointment, only my slow steps broke the silence. There was a queer uncertainty about my surroundings, for the gray-white sameness of twilight snow everywhere and the absence of shadows and dark objects for contrast caused hills across the fjord to appear now ten miles distant, now at my feet, now deliriously both distant and at my feet.

Moonrise was signal for a host of shadows to emerge from their lairs behind boulders, and ledges, and icebergs far at sea. Monstrous and tiny shadows alike stretched prone and suppliant on the snow, prostrating themselves before the sole deity of Arctic winter skies. The moon continuing to favor them with her presence, they began with infinite caution to stir and to hunch themselves up behind their shelters, as though preparing to rise.

From atop Disappointment the scene was one beyond emotion. Snowy fjords, mountains, the Greenland ice dome, all were bathed in calm silvery light; perfect beauty, perfect peace. Here and there on land, on remote craggy icebergs, silver was edged against jet shadow. Toward Baffin Land a dim white line drawn on the sea's

dark surface marked the encroaching ice pack which soon will merge land and sea. More than ever I felt unreal, a creature without place or time. Painfully I struggled still for some understanding, some emotion, with which to grasp what I saw, to memorize it, to make it real, or myself.

Chapter 16

THE LONG NIGHT

THROUGH the crackling of the static I caught the words 'Demoray' and 'Up-ernivich.' It was a message for Max. The radio behaved like the ordinary child in company. Through intermittent squeaks and squawks we gathered that mother and father were fine. Flint had had an unusually heavy snowfall. More static, and the sender was brother Jack. Then came the inevitable Rugby football scores.

Max tried bravely to conceal his pleasure. The period of announcements seemed interminable. At last, the words "a message for Carlson"—now Max could share his pleasure with me. From Mary Jane I learned that she was enjoying her schooling at Ward-Belmont and that our families in Ironwood were all well.

Tonight's Arctic broadcast was the first to get through to us. The announcer succeeded in mispronouncing almost beyond recognition Upernivik and Demorest. Max, however, is not the first man to have his name mistreated in Greenland. At Mt. Evans a package of walking sticks sent to our director, Dr. Hobbs, was addressed on the bill of lading to Dr. Hoob—a pardonable liberty in a language where vowels usually appear in pairs, and consonants are seldom twins.

December 8: Despite the smallness of our force for big game, Andreus is alert for stragglers from the white-whale herds. One such prize would solve the meat problem without further efforts.

The white whale (Delphinapterus leucas) reaches an average length between twelve and fifteen feet. The young whale is dark

brown-gray, changing to a milk-white color upon adulthood. In summer it ventures as far north as Smith Sound in search of cuttle-fish and fish, which is its food; but it winters south of Greenland, even having been reported off the coast of New Jersey. During migration the herds of from three to several dozen coast along among the islands and fjords, traveling at the rate of perhaps twenty or thirty miles a day over established routes, and it is then that they are most hunted.

The vicinity of Pröven affords a natural trap. Beyond the village lies a large offshore island, separated from Greenland by a narrow channel through which whales must pass to avoid swimming out to sea. When a herd is sighted, nets are drawn across the narrows at one end of the channel, while men in motorboats patrol the other, and with shouts and flourishing of arms slowly drive the animals back and commence to kill those nearest with guns. Sometimes days pass before the bloody slaughter of trapped whales is completed. This season's catch at Pröven amounted to 308; and great was the feasting and rejoicing, for there was meat and blubber to spare for all Eskimo villagers within miles.

In the winter during calm weather a herd of white whales may be cut off from open water by a belt of ice. Distressed and panicky, they hunt for any opening through the encroaching ice. As the cold continues and the new ice forms, they work to maintain the hole of open water. Savssat is the Eskimo word for a herd of whales at such an opening. If the temperature is low enough, condensing vapors rise from the open water. The breath of the whales expands the condensing vapor into a column visible at great distances, thus leading to the detection of the herd. Unable to escape, and forced to come to the surface for air in this manner, several hundred white whales can be killed in a few days.

The narwhal (Monodon monoceros L.), which is similar to the white whale in size as in many other respects, is also a migratory whale that appears in west Greenland. It differs from the white whale largely in its color, which is a mottled gray, and by the presence of a tusk. This tusk, which may reach a length of nine feet or more, is a spirally twisted, horizontal incisor tooth. The only other tooth it possesses is a second incisor, but this is merely vestigial.

Tomorrow is Susan's birthday. Susan will be fourteen, no longer a child but a *niviarsiak*, a young woman. All day Max and I have been roasted while Ewa baked a birthday cake for the occasion. Although it is 10 degrees below zero, we finally had to take to the hills to escape, where we walked about swiftly fighting off the cold.

December 9: Natsiorsiorfik Holiday! Long reminded of the approach of this event in Susan's life, we threw a party to celebrate her debut. The entire population of the island was invited. The guest of honor we presented with a flashlight in a fancy casing, with a bright red box containing a bottle of perfume, and with a sizable blue and red handkerchief, all of which very much pleased the already happy debutante.

Refreshments included coffee and cake, furnished by the parents, while Max and I contributed sugar and powdered-milk "cream" for the coffee, canned fruit cake, cigars, cigarettes for the ladies, and schnapps for proud Papa. Andreus became very lively. With vigorous gesticulation he indicated in pantomime how it felt to have a big drink, how it felt to have a little drink. Ewa and Susan sipped coffee noisily, the radio played, Max and I acted the genial hosts trying almost futilely to keep all plates filled, Axel puffed away at his cigar, gulped his food and belched lustily, the room became dense with smoke, everyone was having a splendid time.

So thick did the atmosphere become that it attracted Andreus' attention. Confidentially he informed me that Greenland law forbids sale of cigarettes to children under fourteen, yet does not prohibit their smoking! Why, parents sometimes allow young-

sters of no more than five to smoke! Not in Augpilartok, of course; wicked Upernivik was another matter! Andreus became quite agitated at this enormity, in his excitement spouting columns of smoke like a breathing whale, until Max and I prayed inwardly for our guests to go happily home.

December 10: Last night's celebration kept us up so late that today we have alternated between work on our records, and sleep. Besides, a cold draft from the open window near my head woke me in the night, frozen and nauseated. The nausea passed when I covered my head, but with the steady drop in temperature I have become convinced that my crop of hair, unharvested since July, is not yet long enough for protection.

I have noticed also that when exercising these days a phlegm rises in my throat. It is nearly always black. Probably our lungs are caked with coal dust and soot from stove and kerosene lamp. However, carbon is not unwholesome, as the experience of softcoal miners proves, and we feel more fit than ever we did at the university.

December 11: The perfume given Susan on her birthday did not excite nearly as much appreciation in Ewa as some nitro-solvent Max was using to clean rust from an alpenstock. He had to pour a little on her sleeve so that she might take the delightful smell home to share with the other Petersens.

Though the sky was cloudless, we were able to follow the balloon up for only eleven minutes. Darkness at noon is so great a handicap that I have decided to discontinue aërological work until sunrise, in January. Meanwhile we shall have more than enough to do, preparing for our sledge trip north. The sledge lashings will have to be replaced, and repairs and checking on instruments attended to. Puppies will have to be broken into harness for additional team strength. Indeed, the many activities in our regular daily routine will keep us busy.

December 12: Unvaried routine.

December 13: Ewa has made a practice of entering during supper hour to empty our coffee pot when we are through; her excuse being that she washes the dishes. Afterwards, she likes to loiter and peer over Max's shoulder as he reads. I am often less annoyed at this interruption of our privacy at its pleasantest, than troubled by the difficulty of repressing my impulse to twit Max at the compliment this interest pays him. Tonight, however, we planned to outwit her by eating an hour ahead of schedule. But we were not half through our meal before Ewa appeared, all smiles, and unconscious of any display of preternatural powers. I was forced to ask her to leave when the dishes were done to avoid having the the presence of a spectator complicate my bi-weekly ritual of the bath.

While Ewa was doing dishes I had made countless trips gathering armfuls of snow and ice to melt for my ablutions—the sheer luxury of the occasion merits the word. Poppaea Sabina couldn't have been prouder of her tile baths than we were of our fivegallon oil can which we had converted into a very usable tub by cutting the side out. My preparations took a good half-hour. Everything, soap, towels, and clean clothes must be near at hand as an Arctic bath very closely resembles the treatment given lunatics who are suffering a fit—an extreme variation of hot and cold. My nakedness startled me, for I was so seldom peeled to the skin.

From the "all-over splurge, get it over in a hurry" method, I had reduced my baths to a neat little technique. The vertical approach proved the sanest. Being careful not to splash one drop on my shivering body, I washed my head, quickly grabbed the towel, vigorously dried that portion of my anatomy, donned a fur cap; then I proceeded downwards, taking my body in portions, more or less as a hog is marked off in the meat buyer's guide. As nearly as possible I clothed each separate section after its washing. What a feeling of exultation as the last foot was soaped,

rinsed, dried, and socked! Our baths always left us so exhausted that Max and I had a gentlemen's agreement to dump the remains of each other's "tin-tub-chills." Feeling as laundered as a dress shirt, I climbed into bed, where it took an hour to restore circulation and silence my chattering teeth.

Later in the evening Ewa returned to exhibit proudly some drawings Axel had made. They are rather crude, and not too well proportioned, but they give an excellent idea of an Eskimo's interest and impressions of things. The pictures deal with objects and scenes that have become a part of his daily life. Characteristic of his treatment are hunting scenes, sledging and boating pictures. His observation of detail is phenomenal. A sketch of the Saelen shows faithfully shrouds, ratlines, stays, and catheads, and the way each is made fast—even the spring stay, of which most sailors are unaware, was located and accurately drawn in.

Axel is not alone in his talent. Both Ewa and Andreus are surprisingly artistic. Ewa's Sunday *kamiks* are ornamented with delightful mosaic patterns achieved by sewing together narrow strips of red, blue, yellow, green, and white skin. The decorative effect is possible only by a careful blending of colors. Andreus' contributions to our artistic life are carvings in ivory from narwhal tusks. Tiny miniatures of whales, polar bears, walruses, and seals are the products of his imaginative mind and keen-edged knife.

December 14: We have become Art Patrons. Axel brought us more pictures today, and as an incentive to greater efforts was given two cigars. Sniffing them, he vowed to reach new heights.

December 15: Low wind and temperature during the past week allowed the fjord to freeze solid. While I was taking an observation this morning, Andreus and Axel went by with their nets to begin sealing through the ice, and I decided to accompany them. The trail they follow over Mt. Disappointment is an unsafe one. In several places a slip or misstep might result in a fifty-foot fall upon sharp boulders scattered at the base, and not enough snow is

left to cushion the shock effectively. The dangerous areas could have been avoided by going around: I cannot understand why a less precipitous route was not chosen, since little time is saved and seals caught must be hauled backbreakingly along the same trail.

For a half-mile or so Andreus was kept busy chasing back two dogs who persisted in following us. When these efforts failed, he tried to cajole the pups closer; but they scented danger and refused to oblige. In despair, Andreus asked for my help. I could not well refuse to aid, but I called the dogs to me reluctantly, for I had never had cause to punish either, and they came up wagging their tails. Moreover, the severe chastisement they received did not have the desired effect. They continued trailing us, at a greater distance, joined by a third pup, and finally we had to ignore their presence.

When we reached the shore we set out toward Kekertarssuak Island. The ice was about six inches thick, but where currents are strongest it had thinned out to a mere film. I could not detect the difference myself, though Andreus seemed to sense danger almost instinctively, and I determined that neither Max nor I should ever venture out unaccompanied. At Mt. Evans I should have lost my life through my foolhardiness had it not been for an Eskimo who fished me out of the icy waters of a glacial stream flowing under apparently sound footing. Sometimes even Eskimo skill fails, when currents treacherously shift direction and location, and then tragedy is the outcome.

At fifteen yards' distance from shore my companions set to work at once. Using an ice chisel—a cold chisel attached to a six-foot shaft—they dug three holes forming a nearly equilateral triangle. The holes finished, one end of the net was tied to the shaft of the chisel, another to a small chunk of ice frozen to serve as a peg near the outermost hole. Then the shaft was thrust down through this hole and launched toward the center opening, where presently it bobbed up and was hauled out with the end of the net

attached. A string was tied from the middle of the net to another convenient cake of ice frozen on the surface, and the wooden shaft launched as before toward the third hole, where the attached end was secured as were the others. As a result of this manipulation, the net was now spread out below the ice in wedge shape.

Hunting nets such as this one are made of ordinary twine, and usually are thirty meshes wide by twelve deep, with eight-inch meshes. So cheap and easily constructed are they that even poor natives own several, whereas Andreus had a dozen nets, and twine for as many more.

Our leader now brought us to a trap set yesterday. Kneeling down, he reopened the middle hole, scooped out the ice, peered into the dark water underneath, and grunted. I wondered that he could see anything in the darkness of the long night, and asked to look. One could not have read newspaper headlines with so little light as the dark gray sky reflected, yet under the ice the water seemed faintly luminous, and I could make out a dark body rocked gently to and fro by the current, as though the trapped seal were asleep.

While Andreus enlarged the nearest hole preparatory to drawing in the seal, he explained that traps had to be visited daily because of sharks and salt-water leeches. In the course of a day or two they are capable of stripping a seal clean of blubber and meat.

As soon as the seal was hauled up, Axel and Andreus fell upon it and began to pummel the body furiously with their fists in order to relax the muscles tightening during suffocation, when the animal became tangled in the net while seeking some favorite breathing hole. Then the trap was reset, and we began our return with the catch harnessed to Axel. Back along the same steep trail we went, the seal bumping and dragging behind us, and now and again carried on Axel's back like a porter's trunk, Andreus and I lending a hand when the stiff going threatened to send him into reverse.

December 16: I went out for coal this morning and found the top of the pile as smooth as though fuel had never been dug from the bin. Not Natsiorsiorfik brownies are responsible for this neatness, however, nor would any of our Eskimos trouble himself; the tidying up is done by our dogs! What is more, almost nightly they fight for the privilege!

The secret lies in the desirability of the coal bin as a nest. Its board walls and surface that can be easily smoothed make it the perfect sleeping place. Unfortunately, this snug lodging affords room for only two tenants; and, should one leave his bed for a moment, miraculously his place is filled before he can turn around, nor can it be regained save by forcible eviction of the intruder. For Max or myself to step out the door is a signal for other dogs to jump to their feet in hopes of food; but not so the lords of the coal pile. Their inquiring look is our first greeting every morning, and when we have been obliged to eject them to dig our three days' supply of fuel for the indoors box, they stand valiant guard. When we have finished they set to work like good housekeepers scratching down hummocks and filling in gullies until the surface is once more road-level.

December 17: Another dog has died. This time it is not rumor. Case yesterday failed to respond to Andreus' call, and was discovered stretched at full length and quivering from head to foot. Later in the day he was taken into his owner's house, and during the night he died: our second fatality. For fear that the body might be devoured as Takamuak was, the carcass was skinned and thrown into the fjord where other dogs cannot get at it. We are left now with fourteen; further spread of the ailment, whatever its nature, would force us to seek additional dogs in Augpilartok. It is just possible that Case consumed most of the seal bristles presumably responsible for Takamuak's undoing.

December 18: Andreus failed to throw what was left of Case far enough out, for when the tide went out last night, the body was

left above the water level and the other dogs put on the finishing touches.

December 19: Max has not been looking well. I am concerned about him; he is pale and seems worn out. For some weeks now, whenever my geological studies have required extra time, Max has taken over my indoor duties. He has assumed complete responsibility for the preparation of records and, conscientious worker that he is, has not allowed himself to fall behind; and the strain is beginning to show. He works so uncomplainingly that I have been lulled into a false sense of security.

December 20: Max is better and insists upon going about his duties.

December 21: The winter solstice, though we have not seen the sun for fifty days. The continual darkness has an enervating effect. Our minds, accustomed to the refreshing shock of alternating day and night, grow torpid, and I for one must force myself to be congenial when I feel morose, active when lying abed would be easier. Daily I visit the Petersens and play with the dogs—anything, to be out and doing. I have just come back from a grimly undertaken hike with the Eskimos to the sealing nets.

We were gone four hours. The air was sharp and below zero temperature, forcing us to move briskly, though the gloom made footing so uncertain that several times I stumbled and fell. Andreus gave me further instruction in walking over ice. He told me to walk like a nanuk (bear), a beast that can lumber its huge bulk over any ice. By imitating his shuffling gait I was able despite my ignorance of danger spots to follow him across thin areas. As we waddled along in unbroken silence, head low, feet widespread, and shoulders swaying, I began a little to imagine myself a nanuk on the hunt, and might in this excitement have lurched forward snarling at my companions had they not been nanuks also.

The six nets visited yielded only one seal about two and a half feet long. There is little meat on so small an animal, but the satisfactory two-inch layer of blubber made the catch worth while. This staple, a fatty, greasy substance with a fishy smell, would provide sufficient oil for all lighting and heating in the Petersen home for several days.

On my return I found Max asleep in his bunk. Like myself he sleeps better during what is the equivalent of day, but his eyes are puffy, his face gaunt and drawn. No doubt looking into a mirror would startle me. Both of us must lead a more active existence. We must spend hours in the open air and fill the rest of our time so full of routine that there will be no room for unhealthy brooding. It is not safe to temporize with the Arctic, especially now in the period of greatest dark, when a stormy noon is indistinguishable from night, life coming to seem a dream of endless black monotony.

December 22: Last evening Andreus' aged mother was allowed by accident to leave the house unaccompanied. Ten minutes later she was missed, and lighting a torch Axel started to search the neighborhood. Fortunately the dogs showed no agitation. He found the feeble old woman about fifty yards away, lying on her back in the snow, unable to move, staring farewell at the stars. Her weak cries to Susan had not been heard, and she was trembling when Axel carried her home. Should she die, one of us would have to perform the rites of Christian burial. Ewa thinks death may come at any time, but displays no grief at the prospect.

All this I learned during my call today, when for the first time in days I saw the poor grandmother. Bent double with the habit of toil and burden of sixty-five arduous years, wrinkled as only an Eskimo can become when the lifelong cushion of fat has drained away from under the graying skin, she is fast approaching blindness, and can be made to hear only when someone screams in her ear. Rarely do her withered lips open for speech. What has she to do with the living? It is not possible for her to be of help, beyond giving as little trouble as she can. In the midst of kindness she is

isolated, an alien, half bewildered perhaps by incongruous thoughts of her youth, her empty days monotonous with discomfort unredeemed by capacity for enjoyment. For her the long night has settled down, never to be lifted.

December 23: Against my will I have given Belknap a beating, upon Andreus' entreaty. Belknap tugged clothes off the line, and left them and would repeat the offense were he not forcefully discouraged. I am afraid I have been overlooking his sins from respect for his namesake, Professor Belknap.

On the way to our sealing nets this afternoon, Axel twisted his knee sliding downhill, but limped along with us rather than risk its stiffening in the cold while awaiting our return. His father seemed worried about it. Axel expressed no annoyance at the pain from his mishap. If it were not for a pronounced limp I shouldn't have realized how painful the injury must have been. Despite his handicap, he shuffled limpingly over the uncertain ice faster than I, leaving me no time to look around until the first of the nets was reached.

"Puisse nami" (No seal), was Andreus' only comment as he peered into the suspended net.

At the fifth net visited we found a seal lacking most of its head. The shark whose meal our footsteps had interrupted was nowhere to be seen: rarely can one approach near enough to observe a darker shadow gliding under the ice. Andreus says that head and tail are devoured first in order to save the luscious body for last. This childish trait, usually associated with cake icing, seems disconcerting in a shark, which one cannot well picture as being so artful in its gluttony; and it is possible the explanation lies rather in convenience or in the desirability of crippling and killing active seals. It would then be natural to continue eating from the ends. Sometimes, according to Andreus, only a sort of cross-section of the body remains in the net.

I volunteered to drag the seal carcass back to Natsiorsiorfik, so

without further discussion Andreus attached the harness to my shoulders. Little attention was paid to me by either Axel or Andreus as I struggled along behind them. Axel received assistance from his father in the painful climb up Natsiorsiorfik shores, but I was left to my own devices. Now and then when the seal's head bumped against some obstacle a dark chip of frozen flesh was left behind on the snow. It was too cold for blood to run. But I was glowing with the first hard work done in months, and laughed inwardly at the folly of boredom as, panting, I drew near the Petersens' house and the dogs ran out roaring their excitement.

December 24: Tomorrow is Christmas: Max and I were deep in preparations for our "children" all morning. After lunch Ewa came in to present each of us with a pair of Sabat (Sunday) kamiks of depilated and beautifully dyed sealskin. The gifts were accompanied by many gestures and smiles. We feigned complete surprise although Ewa had been hinting casually about them for weeks.

"Pinakoq" (Beautiful), Max and I exclaimed. "Kujonok! Kujonok!" Ewa had outdone herself in artistry and workmanship. We accepted as gracefully as we knew how, for we appreciated her efforts and thoughtfulness, and turned to our gifts for her and her family. Andreus was called in to help her carry the load, for we gave all we could spare of things Ewa had shown that she liked. Each article underwent a thorough study, handling, and comment; together they talked incoherently, as happy as children. Amid much chattering and hilarity they prepared to leave. As they backed out the door, two burly figures laden like Santa Clauses, Max was grinning "from ear to ear," and a peculiar tension made itself felt in my own facial muscles. No doubt Max shared my sense of righteous well-being. Our giving had certainly been a success. The only flaw in our pleasure was that we could not be present when Andreus and Ewa distributed largess in their turn.

It is probably the rule with parents, when they have seen their children rejoiced, to turn about and contentedly present each other with so-called sensible gifts. "For you," said Max, giving me a shirt that had seen a little wear. Thanking him, I reciprocated with a sweater not one whit newer.

We stayed up late for the Arctic broadcast. But as midnight drew nearer and the signals died out entirely, the last of our holiday cheerfulness left us staring at the floor thinking of past Christmas Eves.

"It's what you have to expect," I said, pretending the failure in reception was the sole cause of our depression. "Few messages sent into the Arctic are received. As I told you, at Mt. Evans we heard the broadcast only twice, though all winter long messages were being sent Commander Byrd in Antarctica. We had the best equipment, too, with a radio operator and all! The signals were strong at seven in the evening, faded at midnight, and by the time our messages were scheduled, had disappeared. It's always that way."

"Probably the aurora, Bill. Have you noticed how it's blanketed the radio before?"

Our fragmentary conversation about aurora and associated phenomena trailed off again into silence.

I plunged into sleep like a diver into water.

December 25: They were singing Christmas carols. After a be-wildered moment I touched the rough bar of my bunk and knew where I was. My watch hands glowed at four o'clock. The voices went on caroling softly; blackness punctured by a few star specks showed the window facing the waters which wash north of Nakitaisok. In the bunk below, Max's waking could be sensed. "Kutsinermio nalangnarssingarg, Jisusip kristusip kujonok"—the music of a Lutheran hymn. It was cold: my arm that had been exploring let in an icy bar of air when hurriedly withdrawn into the sleeping bag; my face was numb. Max remained still, down there, listening. "Gutip nalagauvfiata suna—"

Outside, the Petersens stood greeting us, with unseeable round faces opened to the Arctic skies.

Merry Christmas!

Greenland Christmas carols and Easter carols . . . cherished custom, born in times far off when men had time to spare from machines to wish their fellow men well. Caroling Eskimos . . . I found myself back again in Sarfanguak, at church, to which carolers afterwards resort. The squat dark parson in the pulpit with his patched spectacles and Easter Sunday sermon exploding pak-lok-kok sounds until one grew dizzy with the diabolic repetition . . . After services calling on friends, coffee with all, fourteen cups of syrup-thick coffee—I should have to get up and invite the Petersens in!

With a bound Max and I were out of bed, pulling on clothes, and stoking the fire. Tapping the windowpane, Max beckoned the carolers to join us. Soon water was boiling and ready for the addition of coffee.

The familiar Christmas song from Tennyson came over the radio to gladden our breakfast, and to remind us in not unpleasant nostalgia of home.

A brisk hike across our island home prepared us to devour our Christmas dinner enthusiastically:

Mock turtle soup
Seal meat in mushrooms à la Natsiorsiorfik
Corn
Watermelon-rind pickle (the last)
Fruit cake
Nuts
Schnapps (a gift from Dr. Rask)
More schnapps

We were prepared when that evening Ewa came in for Christmas coffee and Andreus for schnapps. "Would you like a drink?" I asked casually. "Asût!" he replied, eyes gleaming, and face wrinkled with pleasure. Because of the occasion Max made it a

"big drink" instead of the more usual "little drink"; but Andreus downed it with a gulp, grinning to express high satisfaction. "Mamapok!" (Delicious) said he.

Much like the conversation about a bridge table, ours turned from one topic to another. During the past weeks Andreus has been happily busy hunting and making plans for sledging, and Ewa has been well occupied keeping her family warmly clothed. Ewa had even taken to making short walks over the hills with Susan. Axel, of course, is his father's constant companion. Only the old mother seems to be biding her time. Andreus spoke touchingly of her. During the evening I learned of a new litter of pups. To climax the evening Andreus made a gift of one to each of us, and we were invited to Andreus' house to make our choice then and there.

The bitch, which had chosen Christmas Day to give birth, lay limply at peace on a sealskin in a corner of the sod hut. Now and again she raised her head to regard with faint anxiety the three tiny pups left her. Three of the blind litter had promptly been drowned, that other sled dogs might have enough food. Max, Andreus, and I, she ignored so long as we kept our distance, standing with gaze fixed on the feeble pink morsels of flesh lying beside her, one destined to be Susan's pet as replacement for Case, one—in my mind already called Tak—belonging to me, and the third to Max. Now both snuggled close and dreamed vaguely of the comfort they had known in the womb, and not of the fangs and lash and still more stinging cold which was to be their life.

Chapter 17

BECKONED NORTH

THE air grew taut with strain. Awareness of the cold night wind prying through my furs sank below consciousness. In the expectant dark my body's every cell felt an aching compulsion to do—I knew not what, except that it was urgent. The tension increased. Then, in the portion of the black sky nearest the horizon, a faint something, an intensity rather than a light, made itself manifest.

Where black had been, and gray-black, and lighter tones of darkness, the brain was dazed by a new sensation vouchsafed. Color! A shimmering curtain, merging down from silver-white to white, to yellow, to ardent orange-red close above the horizon. wavered back and forth before the unimaginable coming of the gods. An anguish of inner cold thrilled me. The lights rushing across the sky seemed almost to crackle. Deep in the tissues of my being the sense of a call to act, to prepare myself, struggled incoherently to gain expression. Nebulous green streamers trembled off to the left above the Devil's Thumb country. Eastward, the curtain melted away into an ecstatic slow dance of bands and rays that shifted frosty colors as they advanced, retreated, dissolved, grew brilliant again. And always and everywhere the subtle chill glory proclaimed that all I knew was nothing, tantalizing me with the promise of stunning revelation; to leave me torn and more empty than before.

But now the sparkling phantasmagoria overpassed the limits of beauty. Hues enriched, shapes floriated, motion grew more rapid; the snow crystals at my feet glowed and appeared to vibrate; a necessity to assimilate the stupendous magnificence threatened sanity; all this must shatter, and the very heavens come showering down in living particles of color!

The celestial trumpeting of hues became fainter. The aurora was fading back into that spirit world from which it had come, its mission accomplished. Paler and paler, then dim; then gone. I walked back under a dark sky in which my dazzled eyes could find no stars, shivering with cold and depression, yet somehow elated.

Tomorrow began the first of the sledge trips in preparation for our journey north. The slack inaction of recent weeks was at an end. In the days following Christmas, letdown had aggravated habitual discouragement to a dangerous extent, and I do not know where it would have led had not this prospect of activity answered a restlessness in our veins. Often now I caught myself staring off northward into the wilderness of ice. There was in me a dim sense that some unframed organic question might be solved by journeying 'toward' the aurora. At other times the thought of motion itself, of breaking free from my carapace-house and leaving the spot to which it held me bound, served to reanimate my hibernating-tortoise existence. Max, too, roused himself and went about his duties with fresh energy. My absences would mean additional work for him; yet the imminent change held more promise of life than the grudging daily increase in light, or rather lessening in the dominance of darkness, which by now made more prominent the outlines of Nakitaisok at noon. Sledge trips were something definite. The spell of eternal monotony that had been weighing on our spirits was broken. Though it might return for Max when he was left behind, never again could he experience so strongly that dismaying inner blackness of one doomed to endless dull repetition.

It had been a bad time for us. Christmas festivity and determined

Christmas cheerfulness had reacted in the days that succeeded. We returned to our routine tasks resentfully, and lacking the pressure of society behind us had to whip ourselves back into harness. The desire to quit irksomely needless duties and just drift was never long absent. Return to normal was (for me) eased only by unconfessed pride in the conduct of our modest Christmas, and by satisfaction at the pleasure given the Petersens.

Andreus at this time was profound in weather predictions, his methods being based upon the garrulity of neighborhood glaciers. Their 'talk,' dull booming thunderous sounds, came from the formation of crevasses in the ice as a result of the glacier moving over an uneven surface. Andreus' theory was that 'talk' signified cold weather, silence, milder weather. Our experience proved him as often mistaken as correct. Weather changes doubtless do affect crevasse formation, but surely ought to be felt simultaneously in camp only two miles away—with which prediction falls to the ground. While Max and I amused ourselves by tuning in as directed on glacial broadcasts, we decided not to forsake the more prosaic barometer.

During the holiday week Susan and Ewa made the acquaintance of Max's typewriter, an instrument they had often overheard, but never used. They were allowed to punch out letters themselves. For a moment interest was acute, as their short, gasping laughter and incoherent comment made clear, though they were less astonished at the product than expected. Presently they tired; their laughter was perfunctory. We knew then that no responsive chord was touched. Presumably the instrument was too inscrutable in its complexity, too foreign from normal needs, to make a deep impression.

Axel, who had tried the machine earlier, nevertheless seemed fascinated. When he saw letters dancing neatly into line beneath the clicking keys he was so amazed that he hardly noticed that Max was offering him a cigar. He gurgled up at us, his round face

beaming, then bent eagerly back over the keyboard, prodding letters there as though they were small animals to be nudged into action. Now long pauses intervened between each poke. Axel was hunting specific animiculae. Our interest he rejected until finished and able to display ecstatically the legend, 'axelpetersen.' When initiated into the mysteries of spacing and capital letters, he wrote with unflagging energy and abundant errors.

December 30th, Andreus was late in returning from his nets. This was too frequent an occurrence to excite anxiety in anyone but Susan, who became frantic with dread, and kept vigil as she had done a month before on Mt. Disappointment, when her father was overdue from Augpilartok. Numbed with cold, she waited on a promontory north of our island. Andreus' return was greeted with a shout, and as always the girl beamed her pleasure, finding no opportunity too small to display graciousness to everyone. It sobers my enthusiasm to consider what would happen should Andreus fail to return from the north with me. More than once I was tempted to discuss Susan's fixation with her fostermother; but the subject is trebly difficult with a member of an alien race. Interference is not likely to produce the effect desired.

But Andreus is careful: even now shifts in the tide cracks in and out from shore caused by changes in the moon are studied and noted for future reference. Sledging conditions are dependent upon the moon because of its tidal influence. A high tide in the north means active currents and, inevitably, dangerous sledging. The fjord is a natural sluiceway for inrushing tidewaters; full moon sends such a current through it that fjord ice is torn away from shore, and the ice foot itself, generously thick under other circumstances, becomes unsafe. In our locality the foot is very narrow at best, because of the steepness of Natsiorsiorfik's banks. Often the sluiceway created by high tides can be crossed only by paddling on a piece of floating ice as a raft. It would not be easy to maneuver a raft of this kind large enough to bear sled dogs and

sledge laden with supplies. On a five- or six-foot cake bearing only my own weight I have been obliged to struggle to keep from tipping and being spilled into the icy fjord.

Andreus resumed his instruction on the technique of ice walking. With legs well spread he showed me how to shuffle across precarious ice. The weight of the body had to be fairly evenly distributed, and never must it all fall on one foot. In spots the ice was so thin that one of the pups, less cautious than we, broke through and had to scramble madly to get back up. Even then, it was some time before he could find a place solid enough to permit shaking off the fast freezing water. I am not sure but some of the droplets sent flying were solid pellets.

The new year was ushered in quietly enough; at least I went to bed early. Max stayed up late, to type notes and complete the record of the day's observations, and reports that at midnight Andreus, substantial citizen, fired three shots into the air. The dogs, which can be pictured as furry balls in the snow, failed to give tongue when Andreus went out, but made up for it after the shooting by baying in concert throughout the rest of the night and most of the next day, as I learned when I awoke January 1st. I gave thanks that I had not waited to greet the New Year. However, Max insists that by retiring so early I missed the most brilliant display of northern lights seen this winter; which may be so.

An overcast sky and falling barometer and temperature did not encourage celebration. This time, too, we admitted nostalgia, though that rather eased matters than the contrary. Remembering Rasmussen, we cheered and drank the toasts we had promised our Danish hosts while in Upernivik. Later in the evening Ewa and Andreus were invited in for the traditional New Year's coffee and cigarettes.

Our conversation drifted from estimates on the worth of dogs, to Andreus' relatives farther north, and finally to sledging conditions. I was getting impatient and wanted Andreus' opinion.

"Tomorrow?" I asked.

Andreus shook his head doubtfully.

The next day proved no better suited to sledging than January 1st. When would we get started? In the more than five months since the Beothic had pointed her bows toward Greenland we had been preparing for this activity, and behind those months lay other months of preparation—it all seemed disproportionate.

At dinner we had the melancholy satisfaction of disposing of the last prized can of mushrooms, forgotten on New Year's Day, so alike did routine make all our days. It must be admitted that the dish was not less enjoyed because marking no holiday. Nevertheless, the fact that several of our supplies were exhausted heightened my impatience to be out and doing.

The next morning I awoke to find the temperature lower than for a week and the weather crystal-clear. With a quickening of the blood I realized that at last we should be able to make a start. Eager memories of sledging caused an uneasiness in my stomach as I hastily dressed and set canned peaches, crackers, and black bread on the table. Max was already up and had coffee ready.

"At last it looks like sledging weather," said Max, highly elated. We were interrupted in our breakfast by Andreus.

"Sila pinaka" (Good day).
"Asût! Asût!"

Max, Andreus, and I hurried to examine the condition of the ice. It was ready for sledging! Ewa, Susan, and Axel joined usonly Andreus' mother seemed immune to the excitement in the air. I hurried back indoors to prepare transit, tripod, cameras, binoculars, notebook, and pencils for the projected trip.

Andreus and Axel, with Max lending a hand, lifted the sledge down from the roof of their sod hut. Ours was longer and narrower than those used in Holsteinsborg and southern Greenland, where travel is mostly overland, and the short runners are strongly curved to facilitate progress on rocky ground. Lack of overland trails restricts sledging in our present locality to coastal ice that is often bad; hence a long sledge with straight runners to distribute weight over a larger area is necessary.

Andreus had fashioned the sledge himself; that is the regular practice. Wood for runners and crosspieces and steel for the "shoes" are bought at the store, at a cost varying from about five to ten dollars. The runners are then shaped with a wood chisel and plane. Steel shoes are attached to them with nails clinched at the top—the only way that nails can be used on a sledge, since the intense cold contracts the wood, forcing nails out. Runners, upstandards, crossbars and general framework are lashed together with dampened rawhide, which contracts as it dries, locking notched joints into place. A completed sledge weighs about seventy-five pounds. On the three-by-seven-foot deck there is room for four or five persons to squat when the going is easy and safe.

Formerly runners were shod with walrus ivory or whalebone, superior to steel in extreme cold weather when friction is greatest, because frost adheres less readily to their surface. The disadvantage of steel is in part overcome by melting snow in the hand and rubbing it over the runners to form a smooth film of ice. Of course steel is superior for strength and durability.

Secured with seal-hide thongs to the front of the platform of the sledge is a central trace of multiple depilated sealskin, and to this are fastened the individual traces. While these were being straightened out, some of the dogs began howling with unprecedented fury. All ten were wild with eagerness when Axel brought them over, bounding about, sniffing expectantly, not even standing still to be harnessed. Not for a moment did their barking, whining, shouldering, snapping cease. Hardly had the last been put into his traces when we were racing over the ice.

The ice was solid in the fjord; the sky, clear overhead. It was light enough to see the outlines of the icecap three miles away. As

we dashed along, nine dogs fanning out, Axel, Andreus, and I running behind the sledge, three puppies frisking beside their seniors, it seemed to me as though I had just awakened from a morbid dream to find myself alive and young and radiating energy. I had forgotten there could be any such thing as joy in living.

Belknap was one of the pups escorting the sledge or abandoning it for private chases as fancy dictated. Bouncing in and around the traces, he escaped being struck by the sledge on a half-dozen occasions by the merest good fortune. Scott, in harness for the first time, did not quite know what was expected of him, and from time to time dashed off at a tangent in pursuit of Belknap or Kopenok (Kraus) or Angutalik (Slawson) or toward some indiscernible goal, only to be jerked cruelly off his feet as the rest of the team swept past and his trace became taut. The more experienced dogs stepped gingerly where smooth ice was bare of snow. Memories of near-disasters made them cautious, but, as Andreus explained, in a day or so they would overcome their timidity about breaking through.

Andreus' driving was almost fine art in its economy. Whereas the despised Holsteinsborg Greenlander is continually lashing and shouting at his dogs, my companion did not once strike a dog on the entire trip. His starting signal—not needed that day—was a mere hissed s-s-s-sik. Ayeh-ayeh stopped the team. When the dogs were to turn right, Andreus emitted a bell-like il-il-il; for a left turn, iu-iu-iu-iu. Seldom was it necessary for him to shout. I believe he felt ashamed when forced to do so, as indicating neglect in training the animals. He was even reluctant to carry on a conversation with me, because Kraus, the oldest dog in the traces, was distracted thereby. Whistling was forbidden because it made the team refuse to pull. All its members were attentive to every word he spoke.

With stronger ice we could have ridden the sledge, for our load

was a light one. The driver is able to equalize the weight by sitting in front of the load, usually placed so that its heaviest part is slightly aft of mid-deck. His legs allowed to hang over the right side, his whip trailing in the snow, he is able to jump off quickly to grasp the uprights to steer the sledge over rocks or rough ice, to guide the wing dogs, or to help a dog entangled in the traces. On sharp turns mix-ups occur: the team is jerked off its feet, or the driver himself is caught in the traces. Often dogs, sledge and men roll pell-mell downhill. In crossing tide cracks that can be spanned by the sledge the driver must jump off and hang on behind, while the team dashes up at right angles and leaps across. He must be ready also to run to the uprights and lean back on the handles in going down a steep slope, heels plowing through the snow—on a precipitous slope the team must be hitched on behind the sledge to slow its descent further.

"Ayeh-ayeh-ayeh!"

The sledge skidded to a halt. Before us through the gloom we could see the white plain of snow give way to inky black open water. The black area of open water extended in broken patches as far eastward as the eye could make out and probably as far as the icecap. Andreus climbed a small berg that reared its head above the ice to reconnoiter. The prospect was not bright. During our brief consultation the dogs lay quietly waiting for the next command; only Scott seemed impatient for a decision.

We should have to take a wide detour, and even then Andreus insisted on driving alone with Axel and myself ten paces in the rear. Again Andreus halted the dogs while he went ahead to explore a safe route. When we moved ahead, Andreus led the way on foot. Aside from Andreus' quiet commands to the team, not a word was spoken. The dogs' obedience, even those in harness for the first time, was remarkable. They sensed the danger and were willing to follow. We kept bearing northward toward Kekertarssuak, almost at right angles to our proper route.

Swoosh! A bit of ice gave way beneath me, and I was immersed to the waist line, grasping desperately for solid ice. Slowly I crawled out of the icy waters. There was not time to waste, and, seeing that I was safely out of the water, Andreus and Axel went ahead without comment. Swoosh! Again I spread my elbows wide as Andreus had taught me, and hauled myself to safety.

I was wet to the hips. With the temperature below zero I should have to keep moving to avoid freezing. I was still dripping when we reached the Kekertarssuak side of the fjord, and Andreus and Axel, who had crossed safely, were anxious to start immediately for home by another route. Feeling little discomfort, I insisted, over their protests, that we continue.

My plan had been to approach the Upernivik ice fjord through the opening between Kekertarssuak and the Upernivik Glacier. This was necessary in order to get the dimensions of some ice-bergs. The rapid currents surging through the strait left another lane of open water, and we were compelled to make another change of direction, again venturing south toward the middle of the fjord. Capable Andreus found solid footing and a safe route to the very front of the glacier, but any penetration of Upernivik ice fjord was out of the question.

The glacier face rose vertically forty feet from the fjord in even, jutting layers that gave it a stratified appearance suggesting the geology of a planet all ice. The overhang may sometimes be caused by faster-moving upper layers. Here, it was probably the result of heat-absorbing debris. A thin layer of rock marked the location of each overhang.

Along the land margin where we stood, the side of the glacier rose from a normal sloping wall to a steep cliff continuing upward as a cornice six feet high. The ice was not solid, but granulated and filled with air bubbles from top to bottom. In a way the glacier front and side resembled an immense rubble wall ill constructed of ice pebbles. Pebbles in upper strata were walnut-size, those

lower down reached the bulk of small pears. With my alpenstock I detached a few chunks and examined their wavy, streaked grain, like that of pine wood, and noted that the bubbles were shaped like hen's eggs. Each ice granule is an individual crystal. Their growth is connected with interchanging meltings and regelations in the interior of the glacier as it creeps outward toward the coast.

Andreus and Axel showed no interest in my discoveries. Several times Andreus pointed at my frozen boardlike trousers and said, "Iarpok." I assured him that I was quite comfortable and ready to proceed. Axel, in the meantime, was readjusting the equipment on the sledge. I had decided that there would be no need for the transit and tripod.

We began to climb to the surface of the glacier by a circuitous route made vastly longer by Andreus' dread of sledging over rocks, which, exposed on the ice surface, might wreck his laboriously constructed sledge. Striding along up the 15 per cent gradient, I looked around to learn what I could of the origin of this ice fjord's peculiarities. The darkness, however, made observations impossible.

A place was found where the cornice had crumbled, tumbled chunks of snow-packed ice sloping down from it to our bank, and to the glacier surface on the farther side. Soon we came out on a two-acre expanse free of cracks and but moderately hummocky, over which the sledge could be drawn at a good pace. Then our troubles began. Our sledge rocked, pitched, rocked, jarred against rigid "waves," crashed alarmingly into the dogs. Andreus began to look worried. Now the traces became tangled and the dogs started quarreling until the efforts of all three of us were required to quiet them sufficiently for Andreus to unravel the traces. This was a cold, excessively disagreeable task. It had to be done barehanded despite the bitter winds sweeping the ice-sea, and the more stubborn knots had to be loosened with the teeth, an act not rendered pleasanter by the treatment to which the traces had been exposed by the dogs.

When we were able to start again we found ourselves confronted by a network of fissures and wide crevasses that put an end to further thought of sledging. The widest extended as far as eye could reach. In the half-light it was impossible to guess their depth, but I knew from experience that a hundred-yard line might not sound the bottom of some. The most pronounced transverse crevasses were obviously the joint work of the downslope in the land nearing the sea, and of the corresponding more rapid movement of the upper layers. Clusters of smaller fissures indicated probable irregularities in the bedrock over which the pulverizingly immense ice river rode.

I decided to venture into this area to study it at close range. I wanted to learn the direction of the system of crevasses and fissures. It was necessary to pick my way cautiously. Using my alpenstock as a probe, I had advanced only a few yards when a snow bridge gave way under me and I found myself pitched forward face down across a fissure the bottom of which my stomach, not my eyes, could fathom. For a moment I lay there bridging the gulf without thinking that there might be hope for me. Then, bracing my alpenstock, which easily crossed the opening, I wriggled back to safety where Andreus and Axel were waiting to receive me. I agreed to return to the fjord.

An hour later we reached the shore of Kekertarssuak and stopped for rest, the exertion having warmed us all. Looking back, I realized more than ever how vast was the expanse of ice fronting the fjord through breaks in the grim, dark headlands. Today's exploration had scarcely touched the one glacier visited, and there were many of them, the Upernivik alone descending to sea level in a tongue of ice ten miles broad. Throughout the year, even in the hottest days of summer, the Upernivik fjord is choked with pack ice and bergs, the encircling glaciers creating their own chill climate in defiance of the day-long sun.

The face of the glacier south of Kekertarssuak rose in a forbidding cliff out of the water for miles along the coast line. Occa-

sional sharp reports as a new crack opened had made Andreus apprehensive: he had refused to stop on the glacier side of the fjord. Now he pointed excitedly across to where layers of debris along the foot were beginning to spout off into the water like slow waves from a barge's bow. As the debris slid under, the intermittent sharp reports were muffled by a heavier thunder. Large, jagged cracks opened up on the cliff face, and tons of pulverized snow and ice showered down. A low rumbling, like that of a distant train crossing a trestle, continued without interruption. Slowly, almost gently, the jutting brow of the glacier seemed to tilt forward over the fjord. It leaned farther, farther: unmistakable now; past the center of gravity; I no longer breathed, the others too were silent; something must happen—there was a horrifying grinding crack of giant bones snapped, and the whole mountainous mass toppled forward, hung in air, then crashed shatteringly through the pack ice with a boom that resounded in a thousand voices, loud and small, from cliffs and floating bergs round the fjord! Water gushed through tide cracks in walls, and hidden bergs pushed their tips above surface as though investigating the disturbance. Presently the ice in midfjord began to buckle and strain. The snow cloud subsided from the cliff, and we saw that a great wedge had been undermined by the lane of open water that had prevented frontal approach and broken off.

Dazed, we turned to go. On the return the dogs pulled with better teamwork—even Scott seemed to realize his new duty—but without spirit, as though dreaming still of the birth of the iceberg. My old fancy of exiled glacial giants came back to me. The terrible birth pangs witnessed seemed a sacrifice to their need for sending out emissaries to reglaciate the earth that once was theirs. I was seized with restlessness despite my fatigue, and by an insane temptation to start the journey north without delay.

Chapter 18

TOUGHENING UP

I CE to sledge on, clear weather, and the Upernivik Glacier to be measured! What better motivation could there be for another trial run.

Today Max accompanied us. "Did you drive at all the other day, Bill?" he shouted.

Max and I were anxious to give directions to the dogs, but Andreus did not feel that several of the new dogs were ready to obey a strange voice. Fortunately, a severe cold snap had solidified the treacherous ice and the trip was uneventful.

Kekertarssuak ("The Big Island") loomed ahead, a study in menacing browns and white.

"I'll be seein' you!" I said to my escort, and waved them onward. They sped away toward the inland ice, a constellation of upright and horizontal furry bodies fading into dim space. I turned my attention to Kekertarssuak. It was a "Big Island" all right, but hardly a mountain. The ledge where I was going to set up the transit and tripod in my packsack was at an elevation of about five hundred feet beyond several smaller hills.

I began to climb—to crawl, rather—up the steep side of a preglacial ravine. The first few steps told me what I was in for. Snow waist-deep impeded my progress as though a football tackler clung to my thighs. Where the crust had formed, the going was worse; I broke through again and again, and wore out energy and patience in trying to mount on the fragile surface once more. There was no alternative. Snowshoes would have been worse than useless on so steep a slope, among jagged rocks. Though not warmly dressed, I was soon sweating streams. I should have sweated naked. The burden of tripod and transit seemed the last straw—a heavy one!—but what drove me frantic was the malice of the knapsack straps in loosening and opening while I struggled through drifts shoulder-deep. More than once I had to retrace my wallowing steps: it was a heroic act of will not to abandon these objects of torment. In despair after an hour of constant interruption, I discarded the pack and dragged transit and tripod after me. That I went on at all was due to a thoroughly aroused temper.

At last the near end of the shelf I had selected as my destination came in view—and my strength suddenly ebbed. It took me minutes to cover the last few yards of climb. Yet when I reached the shelf I drove myself to work without pause for breath, setting up the transit as planned facing the Upernivik Glacier, where Andreus and Max had meanwhile erected stakes.

It was too dark to locate them.

The brief light of noon had already passed, and I could just make out the bulky figures of my friends. To locate stakes in the dusk at a thousand yards was impossible.

Strangely enough, I was not dejected. I was glad to have finished: it was only on the way down that I became angry at the thought that a flashlight fixed atop each stake would have solved everything.

A blizzard rapidly approaching from the west darkened the already gray sky and made haste in my return to the fjord essential. Abandoning the instruments where they lay after marking the spot with a cairn, I started down the ravine I had ascended. It had taken more than two hours of struggle to make the climb. Now, slipping and skidding, I rushed down the steep slopes at risk of my neck, and presently when I lost balance and fell I took to tobogganing on my sealskin trousers, using the alpenstock as brake and rudder. It had become very dark. The onrushing bliz-

zard, the icy choking wind of my descent, rocks and curves, unsuspected precipitous slopes that dashed me forward at speeds beyond control with my heart at my teeth, the fact that at any moment I might be sent sailing off into space through inability to govern my course, all combined to make the ride exhilarating as that of a Valkyrie.

When finally I reached the fjord and staggered out on level ice, the others had not arrived. A glance at the skies started me back alone. I was overtaken by the sledge before I had gone a quarter of a mile, and we began racing homeward. As we neared home snow was beginning to fall, screening off the landscape, soon hiding it. Ewa had the stove roaring a welcome for us. A perfect day.... Boy, what I would do to some food!

In the morning a northeast wind brought the temperature up to 16 degrees. Later, the wind shifted to the west, and by evening the mercury was at five. So long as the winds blow from the ice-cap we are favored with moderate temperatures, rarely below zero, and though this is "cold comfort" enough, it is preferable to the subzero moist winds from over Baffin Bay. The explanation of the paradox lies in foehn effect of downslope winds from interior elevations. The air is heated by compression in much the same manner as air that is pumped into a bicycle tire. To guard against abrupt wind shifts we are careful to wear dry clothing at all times.

That evening Ewa came in with a voluble account of dogs fighting outside her hut, herself too much occupied with household duties to investigate, but the old grandmother tottering out to learn the cause of the disturbance. The dogs were quarreling over a fox that one of them had killed near a meat cache. Max, thinking that it was the old woman who was killed, looked horrified. When Ewa went on to explain that the skin was undamaged, and smiled her contentment—

"Iarpok!" muttered Max with gloomy headshakes. "Iarpok." "Ajungilak!" Ewa retorted sternly. It was a "good" event; the pelt being worth twelve kroner.

Max thought Ewa was pleased for superstitious reasons that at least the grandmother's skin was left intact. Nevertheless, he saw no reason for rejoicing over the death of Andreus' mother, while Ewa failed to understand why a good fox pelt should be bad. Both enjoyed a good laugh when they became aware of their errors.

During the night one of the dogs was swept away on a floe. Hunt had curled up to sleep on the fjord ice off Andreus' hut, and the gale blowing then had detached his section from the ice foot and floated it away. Perhaps Hunt awoke promptly but hesitated to throw himself into the water. Old Tak alone of all our dogs would have been undismayed at the prospect of that icy bath. One can picture Hunt nervously approaching the obscure confines of the narrow floe again and again, now whimpering, now furiously vocal, or silent with dismay and unbelief, and all the time driving out toward open water, waves already lapping higher . . .

When Andreus missed the dog the next morning he climbed the cape to search the fjord with his glass. He was just able to make out the floe on which Hunt was being driven to sea. I suggested launching a boat and giving chase, but Andreus thought it too late for rescue. By the time we gained the spot the dog would have reached some solid ice to the west and made his way home to Augpilartok. I knew that he would be happier there among dogs to whom he was not an outcast, and his original master would feed him until our arrival a week or so later on our sledge journey north.

We learned at that time that Hunt never showed up.

The day's sledging took us to a section of Upernivik Glacier overriding a small island about two miles southeast of Kekertarssuak. Another dog, one of the pups, occupied Hunt's place in the traces. With Andreus and Axel leading the team over ice covered with a foot of soft snow, a two-hour run brought us to the foot of the ice river I was anxious to study at close range. Its precipitous slope was heavily crevassed, and from a prospective

climber's point of view was forbidding, indeed. Compared to this, the ascent of Andreus' 'talking glacier' had been child's play.

Scattered boulders and deep snow near the foot of the island leading to the glacier made approach extremely difficult. The dogs were helpless in the drifts, so we decided to leave them behind in Axel's care. It took Andreus and me two hours to advance about seven hundred feet from the fjord. From the island proper we were able to climb only a hundred yards over the rough, steep surface of the ice before our progress was halted by mountainous hummocks and ridges of such proportions that a slip off to either side would have meant a fall into a bone-shattering chasm. Since serious work was out of the question we decided not to jeopardize our lives and painstakingly worked our way back to the glacier's edge.

Here we were confronted by the descent of the hundred-foothigh wall of the ice mass. This wall sloped at an angle ten degrees from the vertical. Some of the larger boulders protruded ominously through the deep snow at the bottom. What to do? A detour via the island would take another two hours. A careful descent could be accomplished in twenty minutes. We ventured it though this would have been a risky bit of mountain climbing—I am no mountaineer, anyway—even had not the face been slippery ice.

I gave the crampons on my boots one last inspection. Gingerly I started downward. With each step I dug my feet into the immovable ice like a golfer finding footing for a blast out of a sand trap. The pick end of my alpenstock gave me further assurance. Step by step I proceeded. Then Andreus started down cautiously after me. I had gone about twenty feet of the hundred or so when I heard a choked cry and saw Andreus wavering above me, no alpenstock to steady him; and then he slipped, clawed desperately at my legs as he slid past, and I was falling, sliding, my alpenstock

splintered under the impact, the two of us in a heap now, sliding and falling toward the rock below.

The next I remember was swimming up through a snowdrift, snow in my ears, my eyes, my mouth, gasping air, and seeing that we had been tumbled from what looked a mountainous height into a drift beneath a fatal ten-foot cornice bordering the glacier's edge.

"Kanok-i-pit?" exclaimed Andreus in my ear. He seemed very much amused. Snow coated his furs from head to foot. "Nakartor-pog" (One happened to fall down), he said, becoming serious as he handed me a splinter of alpenstock.

Climbing the remaining few feet to the fjord level, we rubbed ourselves tenderly where rills in the ice had caused bruises. Apart from this and incidental scratches neither of us seemed the worse for the experience, although it was long before my heart ceased protesting the shock.

On the way home we sighted five seals lying on the fjord ice a mile ahead. The dogs, catching the scent soon after, became almost unmanageable in their eagerness to reach the prey. Since Andreus had no gun we decided to enjoy what sport we could. Kraus was slipped from harness and allowed to dash ahead, the pack pulling our sledge in wild pursuit over smooth and rough ice, the wind tearing at our faces as we bore down on the seals at express-train speed! It was all we could do to hold on. Kraus was within fifty feet of the surprised seals before they dived with one accord into their air holes. So great was our pace that the team barely swerved from the holes over which Kraus stood growling his challenge.

The next morning we planned to complete the work on Kekertarssuak that darkness and storm had interrupted, but at ten o'clock the thermometer read 17.1 degrees over the freezing point, and by the time we started the trail was ankle-deep in slush. Disgusted, the dogs pulled spasmodically, hating to wet their feet, ready to rebel. I was sure that Andreus would be forced to use his

whip. However, at a sharp command they threw themselves into the traces, and splashing and skidding we began to cross the fjord toward the island.

Kekertarssuak's headland proved too steep to climb, though we tried again and again, until exhausted and drenched with sweat and slush. I gave up then, and decided to content myself with taking a few sights along the ice before turning back. I wanted to have a detailed survey of the front of the glacier completed before the more hurried activities during the improved sledging season to come.

The middle of January is past, yet the temperature has not once fallen below zero. To satisfy our curiosity Max and I calculated the average: slightly above 10 above, approximately the same as for St. Paul in midwinter! This is very discouraging. Not only are our sledge trips confined to short treks, but without a good freeze it will be impossible to take the mail and completed expedition records to Augpilartok—which must be done soon, certainly before the northern trip to Devil's Thumb. Friends back home complain of the cold, while in latitude 73 degrees, hundreds of miles north of the Arctic Circle, there is open water not two miles from the inland ice.

Andreus even determined to kayak after seal. The water was glassy and inviting, shadowing clouds and the glaciers and snow-covered hills in the background, the half-gloom making of sharply silhouetted boat and occupant figures of mystery. Andreus paddled a few strokes, rippling into myriad fragments the clear dark reflected picture over which the kayak floated. Then for long motionless minutes he drifted slowly over mountain and ice river scarcely grooved by his gentle passage. A dim wraith floating through an obscure dream world into oblivion.

It was night when Andreus returned, empty-handed. There was about him an air of dissatisfaction, as though he were reluctant to come back to a life devoid of promise.

Next morning the long awaited sub-zero weather—2.7 degrees below—brought renewed hope and greater darkness, the sky murky and a strong wind blowing from the east. Sledging would be a battle. Andreus and I were eager for it. The dogs snapped at one another and looked urgently at us. They were keen with the same exultant savagery that in me seemed bursting for an outlet. The chafing of the cold wind roused me like an insult, a challenge. Kekertarssuak too was a challenge. The two rounds lost to it had only been in fooling: next time—

Today our destination was the portion of Upernivik Glacier overriding the southern extremity of Umanak. Immediately upon reaching it I began to climb the ice with lavish expenditure of energy. There seemed a limitless supply, a power I could turn on in whatever quantity was needed. The slope of the glacier was not quite so abrupt as it appeared from a distance, and the ascent was fairly easy. Now and then it was necessary to secure better footing by chopping steps in the ice. I examined the character of the ice, the location, extent, and direction of moraines, and the system of crevasses. It was so cold here that for the first time I tried to take notes with my thick gloves on; but the copy was illegible, and, gritting my teeth, I had to work barehanded in the cold.

I was too angry with discomfort to speak to Andreus when I reached him at the seal nets he had been setting in my absence. However, his enthusiasm at the prospects for an excellent catch here, better than the three a week provided by our home grounds, restored me far enough to echo his "Ajungilak" at the seals lying about in scattered groups in all directions.

Near the northernmost island of the Umanak group we discovered dog tracks crossing and recrossing the fjord. They must have been made by one of our own pack, though Natsiorsiorfik is four miles distant. Andreus suspects Cook, an inveterate fox hunter; I lacked the spirit even to suggest methods of identifying the tracks. The return home seemed interminable.

The temperature continues to drop, last night to 12 below according to Max; yet the daily range often is as much as forty degrees. Nowhere can that variation be equaled save in desert regions. Greenland may, indeed, be regarded as an elevated desert with snow for sand and ice for rocks, and humidity rather than aridity as its peril. But the northland desert invigorates and demands work at top speed merely to maintain warmth. A new spirit is in us, anyway. Each day the sun has been approaching cautiously closer to this domain, each day the faint glimmer at noon has lightened a broader area of sky and our hearts as well, renewing hope and encouraging our studies.

On my return from a trip with the Eskimos to their nets—I had intended going on with them across Kekertarssuak to study the Upernivik Icefjord toward Mt. Hobbs, but it was two in the afternoon when I caught up with them and too dark for observations—Andreus urged me to accompany him into his hut to get my pup Tak, now four weeks old. Susan and Andreus' mother were seated on one end of the slightly elevated platform which serves as the family bed fishing seal meat out of a steaming pot suspended over a blubber lamp. Neither spoke to me nor even noticed me. Tak, given me as a present, was lying huddled in one corner of the dirt floor. At my approach he growled. I tucked him, still growling, into my fur glove with only his head exposed and started home, holding him tightly as he became agitated at his first view of endless snow and felt for the first time the icy air that was to be his element.

Tak's reaction to the new world of our house was one of amiable curiosity. Max brought over a pan of powdered milk warmed in water. Though explorer's fare was unknown to him, Tak supped greedily so long as his head was held in the pan; but, the moment I withdrew my hand, up would bob his head and he would begin dreamily licking my fingers, his own tiny paws, the table, anything within reach—except the milk. When returned

to the pan, he began lapping away as though this were what he had been seeking the whole time.

Feeding over, we brought in our other favorite, Belknap. Belknap, a pup still himself, had never seen anything of his kind so small; his eyes opened wide at the sight of what I was holding, and his ears pricked forward as if incredulous at something uttered. Gravely he approached to smell the infant. Then, tail waving furiously, he began licking Tak—head, back, flanks, eyes, mouth, everything. Tak was ruffled, almost smothered. Max had to drag "motherly Professor Belknap" out the door.

Tak did not mind my attentions because I was feeding him. The touch of Max's hand, however, brought forth a faint but earnest growl, like the sound of a mouse turned watchdog. If Tak did not snap, that would come later. Tak was his father's son, a miniature of the intolerant ferocity of the formidable pack leader who had acknowledged only Andreus as worthy of feudal devotion.

The pup's minute teeth spurned a morsel of luscious seal blubber offered as dessert, blubber for which he would fight and be willing to kill in days to come. Now he displayed eagerness to explore the room. Into every corner, behind each box and sack, poked his small nose: Ewa would have cried out aghast at the liberties allowed. I had to admit to Max that Tak's progress was less a dog's than a muskrat's, the resemblance emphasized by the fact that instead of being a fluffy banner his tail was pointed and dragged along the floor. Tak's hind legs were not developed sufficiently to support his disproportionately larger body. But he would soon toughen up.

About suppertime he realized that he had not eaten for an hour. Powdered milk failed to console him, his whines becoming so pitiful that I was obliged to dump him into a spare kamik and carry him home to Mother, who received him with an anxious whine. In another week or so he might be brought back; perhaps I could even take him with me to the States.

Next morning Andreus and I made a third attempt to climb Kekertarssuak, advancing a step at a time with the aid of alpenstocks through powdery snow waist-deep, up what we considered the easiest slope. The summit was only five hundred feet above fjord-level, but it was three hours later and in a state near exhaustion that we reached the height sought.

The outlook for sledging toward Mt. Hobbs was not promising. Huge blocks of ice and mountainous bergs welded together made an extremely rough trail, broken by lanes of open water running between the stationary ice massed along the shore and bays and the ice moving out of Upernivik Glacier. This last advanced at such a rate that by fixing a particular pinnacle with respect to a stationary iceberg back of it the movement could be seen from where we stood. When the advancing mass passed merely a few vards from a projecting headland or cape, choked floes and bergs between were crunched against the shore with sounds of a Gargantuan rock crusher working at low speed. One could almost see erosion taking place. Floe ice fifteen to twenty feet across and a yard thick buckled and snapped like a business card of an unwelcome caller between a man's fingers. Chunks large as a traveling trunk were sometimes flipped into the air. Stately bergs that might have drifted south to sink an ocean liner moved majestically toward Baffin Bay when in mid-fjord and toppled angrily when moving around promontories in their path. A seal or a traveler caught in that torture yard would be spread flat as a bear rug if not thrust fathoms below the surface, to emerge again miles to the south, or perhaps be carried almost to the tropics encased in ice like a fly in amber. Stories are told of hunters caught on floes and carried to the open sea, where the ice raft is battered by the pounding ocean, sending its passengers to an icy grave.

Although Andreus and I were in our shirt sleeves, carrying our anoraks, we were perspiring when we returned to the sledge. With the temperature below freezing, Axel, who had been left with the dogs, was running back and forth to keep warm.

Chapter 19

VOYAGE TO AUGPILARTOK

WITH January 18th upon us I was more than ever anxious to get into Augpilartok. Expedition records must be sent off, and letters too, in time to reach Holsteinsborg before the first steamer called. Besides, I had had a bath—the only one in three weeks, cold delaying the ordeal—on my return from Kekertarssuak, and now I felt keyed up and restless to go, eager to see new faces and renew old acquaintanceships, eager simply to be up and doing.

The previous day I had suggested to Andreus that we pile dogs and sledge aboard the wooden boat he had built and travel by water to the solid ice west of us. The boat could be cached and we could sledge the remainder of the way. To my surprise Andreus looked with disfavor upon the suggestion, hinting that he might lose his boat.

"But why?" I protested. "Your boat won't be stolen . . ."

Without deigning to reply, Andreus was adamant in his refusal. That night, the lanes canalizing the fjord crusted over with ice. Now we could travel neither by sledge nor by boat.

Until the weather settled one way or the other, local exploration had to be continued as before. In the Umanak island region alone there was significant material enough to occupy me for weeks. Here it was the dogs encountered their first hard pull, through soft snow so deep that at times half the team disappeared from sight, then through an area where the crusted, furrowed surface ran into small dunes which seemed completely to nullify the

team's efforts. More than once one of the younger dogs stopped to look back at us, bewildered, as though asking whether we realized the impracticality of pulling a sledge over such territory. Plunging from crest to trough where the sledge would come to a complete stop I felt like a commuter in a suburban train.

Between Nakitaisok, which had been visited with the Rasks early in the fall, and the inland ice ahead of us was the dry bed of a glacial stream fed from a frozen lake about a hundred yards inshore. The channel of the stream runs along a sort of canyon formed by Nakitaisok's precipitous cliff on the one side, and by a fifty-foot wall of ice and glacial debris on the other.

The glacial surface proved to be remarkably smooth, almost glassy, broken only by an occasional stream-cut channel, while the few low hummocks were smoothed further as to contour by hard wind-drift snow. This was an unusually evenly weathered formation. The rough moraine accumulating along the shore bore mighty witness to the devastating power of the ice giant on the march. Here were fragments of entire headlands gouged out by glacial action, huge blocks of gneiss carried for scores of miles on a never-stopping conveyor belt of ice, to wear away the terrain over which it rides yet at the same time build it up again by deposition.

On our return to camp Andreus was called into his hut by Ewa, leaving me with eleven agitated dogs to unharness. They were almost as excited as when being put into the traces, frantic for the meal awaiting them, the affectionate ones making my task more difficult still by their insistence upon licking my face and hands. I did not like to strike them, so wrestled as well as I could with the tangle of interweaving traces and near half-ton of furry dynamos. A motion picture would have shown a convincing scene of savage sledge dogs devouring the cruel villain.

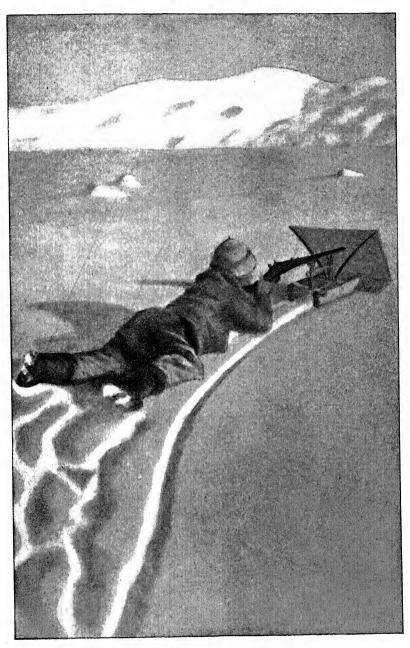
Max told me that the pup James, who had been held back at the start until we were out of sight, had whined inconsolably all day during our absence. Andreus fears that James will never make a sledge dog because of his frail body. If he does not, James may be killed for his hide. Eskimo life has no place for hungry pets.

Between the dogs and my glacial studies Andreus has had little time for sealing, and it is fortunate that Axel displays promise as a hunter. Two days ago he caught a seal in his nets whereas his father had none; while we were exploring today he went out in his kayak and shot another; when Andreus joined him on his return from Nakitaisok he was unsuccessful until after Axel had killed a third seal, whereupon Andreus' luck changed and he managed to bag two. I went out with Susan on their return to help drag in the catch. Andreus, reputed Augpilartok's best hunter, was extremely pleased as regards the prowess of his son.

Next morning the dogs were stolid yet snappish when harnessed. At the command to march they pulled sluggishly, holding back at every unevenness in the ice, with Belknap, the only pup in traces, the worst offender. Andreus explains that Belknap has a worse "headache" from dissipation on seal meat than the others because inexperienced, though all gorged until bloated and belching.

Not glaciers but *utok* hunting was our goal today. An *utok* is a seal lying on ice; hence the season commences when the first warmth of the returning sun sends the animals to bask on the surface. The fact that the sun itself will not be visible for two weeks or more matters little, since we have already had several days of alluringly warmer weather to stir the blood in seal veins.

When a basking herd of seven was sighted we sledged forward as far as we dared, within about five hundred yards, whereupon I enjoined the dogs to silence while Andreus began the stalk behind his shooting screen. The screen is a small backward-sloping cloth structure mounted on a miniature sledge the runners of which are sealskin-shod for a smooth-sliding surface, having two uprights to support the front of the rifle barrel with only the muzzle project-



UTOK HUNTING

ing through a hole in the cloth. Andreus approached the herd swiftly yet cautiously, dropping behind the screen whenever the seals became restless. Within shooting range, he crept forward on hands and knees, shoving the sledge ahead with outthrust hand. I could feel the dogs beside me become tense with impatience. Andreus was within fifty yards now. So noiseless had his advance been that the seals relaxed, forgetting earlier fears. At one hundred feet Andreus lay prone, drew a careful bead, and fired. The largest seal was killed instantaneously. Dropping his rifle, Andreus ran forward to pull the animal away from the air holes—only the slightest motion is required to send a wounded seal sliding into the water—while the older dogs dashed forward at the flash of the shot, even before the report was heard, dragging Belknap and Scott with them, and myself hanging uncertainly on the sledge's uprights as we careened along at all of twenty miles an hour.

Andreus had made a clean hit through the head, and the seal was dead before he reached it. Nevertheless, some fifteen minutes later, when the seal had been roped on the sledge, I saw the tail quiver spasmodically and felt the throb of a steady heartbeat under my outstretched palm.

"It's still alive!" I said, horrified.

"Body 'live, dead in head."

I stared at the body. Breathing certainly had ceased; yet it was not until twenty minutes after being shot that the tenacious heart expired.

We saw two other groups of *utok* without being able to approach near enough to bag any. On our return Axel came to meet the sledge with a satisfaction he could not mask for all his air of casualness: he had just shot another seal, his fourth in as many days; he was still "one up" on his father.

Axel seemed pleased when we said that he was a man now, swaggered a little when given two cigars as reward for his prowess. Ewa, who had come from their hut, remarked that if his success continued Axel would be able to take a wife. At this the young hero showed embarrassment.

That night the foehn wind increased in violence to sixty or seventy miles an hour. It was impossible to stand up before it, impossible even to lean against the wind without being hurled over backward. Snow was needled into face and eyes so stingingly that one warded it off as though confronted by a charge of buckshot. For four hours the little house huddled and strained under the pressure; once a fragment of ice detached from Observatory Hill crashed into the east wall with the impact of a meteorite. In the morning all exposed portions of the hills about us were swept bare of snow. As expected, the great foehn had driven so much ice from the fjord that sledging to any of the glaciers was again prohibited. Despite the intensity of cold preceding the wind, trails had been churned to a slush.

After breakfast Andreus and I climbed Mt. Disappointment while Max was sending up a balloon to determine cloud elevation. With our glasses we could see practically open water as far as Upernivik ice fjord, and, beyond, open water stretched as far as we could see. Once more I urged Andreus to make use of his boat, impressing on him the urgent need for haste in getting our records and mail off in time. Whether we should be able to make the sledge journey north was not the question now.

"All right," said Andreus slowly, "we go. Morning."

Part of the afternoon, when I had accustomed myself to the idea of going, was spent in uncovering more of my face than had been visible for nearly five months—I had not shaved since August, and pruning with clippers was ineffectual—for I must not seem crude in the eyes of civilized Augpilartok. My hair, moreover, had remained untouched since mid-July. It covered my ears and the longer strands reached my chin, so that, as Max said, I could be taken for an Eskimo in the dark, which was about all the time at this season. But there are limits even to vanity, and

after reflecting on the comfort and protection afforded by my long locks I decided to retain them until Max and I left finally for the continent and home.

January 21st showed promising fair skies for the trip. We were up at six, ate a lamplight breakfast of bacon and eggs, and at seven stepped outside into the crisp dark morning. Dogs and Eskimos were animated silhouettes against the paler slope behind the house and the faintly lighted sky to the south. Andreus shouted to Axel, Axel at Susan, making last-minute adjustments and additions to the load. The dogs, never before routed out of their nests so early, barked their excitement, following every motion with their bodies, in their interest magnifying it as do shadows on a wall. Susan and her brother pawed over all the luggage in the beam of my flashlight to make sure that nothing had been omitted. I felt of the letters and reports completed the evening before. We were set to go.

Piled high in the stern of the fifteen-foot wooden boat was the sledge and the whole of our supplies; now the dogs were herded into the bow. Axel and Andreus took their stance amid the squirming mass to work the oars. It would have made a strange sight, that craft of ours, had anyone been wintering 73 degrees North in Greenland to witness it. Heavily weighted forward by dogs and oarsmen, the boat's stern rose from the water like the high poop of some ancient caravel or galleon built to plow tropic seas. The dogs in the bow might have been raided cattle or captives in a Viking ship; I, seated high on the baggage in the stern, Noah himself.

It was light and time to leave.

"Inudluarna! Inudluarna!" (Goodbye! Goodbye!) from the boat. "Ivdludlo! Ivdludlo!" (The same to you! The same to you!) was the response from the shore.

But I was impatient to be gone and, taking a spare oar, nodded to my crew to help shove off. In the half-light, the motionless figures of Max and the women faded like enchanters. Soon nothing was to be seen but dim shapes of ice and the open water through which we rowed, unchecked and free though heavy-laden, toward the west.

Two hours later the boat slowed as the oarsmen struggled to drive it through quarter-inch brash ice; slowed, almost stopped. I took Andreus' place among the dogs and he moved forward to open a path with his ice chisel. Now began a test of endurance. Hour after hour the bow man's arm plunged up, plunged down, splintering the brash; hour after hour we sweated at the oars, our grunts harmonized with crackling of ice as the heavy bow lurched ahead a few feet. The dogs were remarkably quiet, growling only when one of the younger ones stirred restlessly. Andreus found time to explain the significance of every landmark and the best hunting grounds. Once, seemingly by mutual instinct, the Eskimos ceased work to shoot one of the numerous seals we saw. A detour was necessitated to retrieve the prize. Our route was uncertain anyway, aimed at what from a distance looked like old ice. Our tedious progress was not stopped for food; cold meat chewed rhythmically with the rowing was our only nourishment.

About two in the afternoon we reached unbroken ice only to discover that it was not strong enough to support a man or loaded sledge. A stone's throw beyond was the firmer pack sought. We were almost there. Couldn't we manage to slide over the hundred yards of weaker ice somehow?

We could not.

Grimly we set to work, shifting as much weight as possible sternward to enable the prow to ride over the ice and crush it. Andreus continued wearily to chisel a trail channel, Axel and I used the shafts of our ice chisels to urge the boat along. I was reminded of Jules Verne's *Nautilus* escaping from its ice trip in the region of the south pole. For us too progress seemed interminably laborious. Before we had advanced three hundred feet, night had come.

The dogs were becoming so restless in their cramped location that they had to be tied down. Andreus looked worried. "Tatamig pog" (Frightened to death) he explained. Camping for the night in the crowded boat was out of the question: there was nothing to do but go on.

Fortunately, the night was clear and starlit, stars glimmering overhead, in the dark water alongside, dimly on the ice itself. The air was a heady draught. The dogs grew painfully agitated in their cramped quarters.

Axel pointed to them, saying, "One must feed them."

"They'll upset the boat if they don't all kill each other!" I protested.

Finally, it was agreed that they should be fed so generously that there would be no temptation. Our stratagem worked out well, and in a few moments we were ready to proceed.

Axel extracted the primus stoves from the heaped "sterncastle" and set two pots down to boil. Having kicked the dogs off, Andreus had laid the seal he shot athwart the sledge in the bow, ripped up the belly and cut out the liver and heart for the pot. This boiled fresh meat we hastily washed down with coffee.

The meal over, we resumed our positions and began chopping and pushing our way again toward the firm pack ice ahead. All sense of time was lost in the endless repetition of tired arm-strokes. The location of our boat seemed never to alter. There were moments when I was sure only that I was dreaming this.

I went on poling, poling against the ice, until the motion seemed one I could no more change than the beat of my heart or the darkness and stars, which, I felt, always had been, always would be, thus. Gradually I grew numb with cold and fatigue and ceased to be aware of my actions for long intervals.

By the time we reached firm pack ice, it was day.

Our position was now precarious. The floe before us was bounded on three sides by swift currents filled with sharp ice that would puncture a boat such as ours like paper; behind, the ice through which we had been forcing our way for the last six hours had closed in. The first strong wind might set the floe adrift, to be blown to pieces as it drove out to sea. We could not think of rest.

Axel and I unloaded and dragged the boat up on solid ice, while Andreus dispiritedly went ahead to seek a passage through the rough pack and wide currents. We harnessed the dogs and began lashing baggage on the sledge. Axel said something about bad ice that I failed to catch entirely. I myself was beyond caring what happened, almost beyond weariness.

"Quavsinik?" (How many times?) I asked Axel, giving the lashings on the sledge another pull.

"Amalo" (More), was his brief reply.

After a moment's silence while we kept wearily tugging and straightening the load on the sledge, he added, "Nukagpiaq naviaga" (A young man finds it dangerous).

"Are you afraid?" I asked.

"Is a person afraid when his father can worry for him?" he countered.

"Kâ! Kâ!" (Hurry!) We were interrupted by Andreus returning from his reconnaissance. "One does not like to hear women laugh. They will make fun of us to their children if we do not get where we want to go."

From the tone of his voice I knew he had made up his mind. There were two possibilities: either to go back to Camp Scott, or to make straight for the nearest land. Andreus had decided on the latter course.

Since we had only a few hours of daylight left, we were anxious to reach a place secure enough for sleep. Marking the location of the overturned boat with a dark cloth attached to a pole on a tall hummock, Andreus signaled the dogs to start and himself took the lead. He drove with extreme caution, skirting the broader

water lanes and straddling his sledge over ice ridges, like a boat in a canal, with the dogs drawing it walking sleepily on either side. His tortuous route now wound back, now lost us in a wilderness of dunelike hummocks from which we emerged with relief on to the more dangerous margins of the floe. In the gloom open water appeared as black patches against the ice; less easily detected were thin areas where a single weak spot might precipitate us all, men and dogs and sledge, into the icy blackness beneath.

Andreus halted the sledge abruptly. He beckoned to us, then bent to pick up his rifle. He pointed to a darker blotch on the ice ahead of us. A seal.

Neither he nor Axel had slept more than a few minutes for thirty-six hours; they were both as exhausted and hungry as myself, both impatient to gain safety, but—let the heavens fall: a man must hunt.

After the seal was stalked and shot, Andreus returned displaying his attitude of satisfaction with a broad grin. We started off again, the seal attached to the traces of the sledge to serve as a drag upon the impatient dogs, whose lack of caution was a constant danger. Once one of them did break through the ice, but was dragged to safety by his mates before the break spread. Another time we might be less fortunate.

It was growing too dark to see more than a dozen yards ahead when we came at last to a place where we could bridge a narrow ribbon of open water that alone separated us from more solid ice bordering the shore line. On the farther side we called a halt by mutual consent. It required an effort of will, hungry as we were, to cook seal meat for ourselves and to feed the dogs before diving into our sleeping bags with a feeling, on my part at least, akin to exultation.

We were astir early. I got up and looked at my watch: the luminous hands pointed to six. The air was peculiarly "hard" when breathed deeply. It was too dark in the light of a few stars to make out more than the heaped sledge and, some distance away, the scattered forms of the dogs sleeping curled on the rough ice. Now and again one of them stirred restlessly. Axel had begun to boil water for seal meat and coffee, Andreus to load the sledge, without ado. I wandered off by myself for a few moments, and when I returned all the dogs were prowling about, stretching and yawning, snapping absently at one another, or observing from a respectful distance the mystery of bubbling water that they sensed was somehow concerned with food. I was wonderfully empty inside, and breathing the night air was like drinking ice water. As soon as the seal meat was cooked I squatted down and began burning myself with large mouthfuls of it, not heeding the discomfort.

At seven we were on the trail, our sole source of light a brilliant drapery of aurora out toward the north. Presently I gave up looking anywhere except before me, where a dimmer sparkling and fitful play of colors suggested that the ice beneath our feet was charged with some fantastic sort of electricity. In a little while the aurora faded. It was quite dark again, with the only sounds the padding of cushioned feet and the hiss and intermittent scrape of sledge runners. Andreus' flashlight was a stretching, bunching, yellow leech on the ice up ahead. I tugged the cowl of my timiak (parka) forward to shield more of my face from the frozen air. There was almost no sense of effort in moving. I was happy.

By ten o'clock we had covered only three miles and the southern horizon was faintly flushed with pink. Gradually, as the light strengthened, exquisite pastel tints washed sea and sky and ice, the delicate blue of the heavens on our left the dominant tone. This glory of southern sky, the calm reflecting waters of the fjord, the blue-hued ice, and the peaks silhouetted dark against the Arctic morning made a picture almost frightening in its purity. I had the queer sense of being a minute foreground figure painted in the picture, which at the same time I was observing from somewhere without.

Our way led through a jumbled mass of ice and bergs discharged by Upernivik Glacier and now fused solid. There was no choice of routes; it was the same in every direction. We drove the dogs hard to take advantage of the few hours of dawn dusk, cursing when, as frequently happened, the sledge tipped over and had to be righted, the load rearranged, the multiple traces cleared and the dogs restarted. I was rabidly hungry again, but we did not stop to cook food, and I had to content myself with gnawing on cold boiled seal as I drove.

After the faint struggle of daylight subsided into habitual darkness, we stationed ourselves by turns in the lead with a flashlight to reveal the way. This position was taken as a rest. The difficult task was for the others guiding the sledge from its uprights. Three times the handles broke under the strain of keeping the sledge on its runners over that difficult terrain. Not only did my arms, shoulders, and back ache from the continual effort, but as I stumbled along in the deceptive shadowing moonlight my feet were bruised in their soft *kamiks* by the rough ice, and over and over again I stubbed my toes until I was near weeping with rage and too savage to speak to my companions when one of them reluctantly relieved me of my hateful post. Numerous currents, moreover, sent us on painful detours over the broken ice fields. It was late in the evening before we reached the smooth bay ice between Augpilartok Island's snowy hills.

But our troubles were not at an end: so often were currents met with here that we were forced to sledge over gullied promontories bordering the bay. Once the incline to be ascended was so steep that the scrambling dogs were unable to climb it. In despair I looked back at the swift stream that had diverted us. Then I joined the others in unloading the sledge. Piece by piece, we staggered with the baggage to the top, then dragged the sledge up with a rope, the dogs struggling along behind it.

At one o'clock in the morning we had crossed the island, our fifteen-mile, three-day journey at an end. Before us a score of huts

lay black in the waning moonlight against the sea beyond. We started down the last slope. A dog barked, a few lights began to glow. Augpilartok.

Chapter 20

VACATIONING

We charged into the village to the roars of dogs and surprized Eskimos. Men bearing torches, women, tots of three and four, in all stages of undress, poured out of huts, raced beside us, surrounded us and brought our sledge to a halt. "Kujonok! Kujonok!" they shouted. There was much thumping of backs; eager hands unharnessed and fed the dogs, too weary to growl at one another over their meat; our luggage melted away in the direction of a substantial red and green wooden house, identified as that of Olsen, the local manager, into whose presence I was dragged by a half-dozen former acquaintances.

"Kanok-i-pit?" greeted Olsen. "When did one leave camp? How was the ice? Are there any seals near Natsiorsiorfik? Where is one's housefellow?"

My host was a fat, agreeable-looking native, speaking such good Danish that I was not surprised afterwards to learn that he had spent four years in Godthaab Seminary and four more as a citizen of Copenhagen. Olsen had replaced the unfriendly Dahl in October.

Now I replied feebly, "Only Andreus, Axel, and I made the trip. My companion did not come."

"Does one long for sleep?" asked Olsen.

"It is not impossible that a person is hungry?" queried a squat stranger carrying some of my luggage.

"Oh, I think there is a traveler somewhere," commented another whom I recognized as a member of the crew of Saelen.

"It happens that one went on the trail," said another of my volunteer escorts.

Olsen's wife mercifully intervened with black bread and coffee that she had been preparing. As I gulped the scalding fluid and munched the bread I satisfied as well as I could my audience's hunger for news; but I was too tired for talk and soon signaled my host that I wished to sleep. He directed me to a corner of the room where I stretched my sleeping bag on the floor. Since my escorts showed no sign of fatigue, he tactfully shooed them from the house and left me to crawl into my bag.

When I awoke it was to an empty room and the discovery that my knee was too badly swollen to bend. I had wrenched it the day before, but so much discomfort had been my lot at the time that the one mishap more had gone almost unnoticed. Now I realized that three or four days' rest were imperative.

Olsen, finding me abed though no longer sleeping, secured a confession, then went to work to fashion a short cane. With this aid I hobbled about, exploring the house. It was of three rooms, the one private house of wood in the outpost village of 116 persons.

We sat down to lunch not long after, for I had slept late. With three days of hurriedly bolted seal meat and coffee behind me, I reveled in table service, Danish fruit soup, seal steak and gravy, black bread, and beer brought frozen in chunks from southern Greenland, then melted and kept in earthenware jars. Olsen had his private supply of schnapps and tobacco as well—in his scale of living he approached that of resident Danes.

Unlike her educated husband, Mrs. Olsen spoke only Eskimo; but her cooking was sufficiently eloquent, and her manner cordial. This couple had no children other than an adopted niece. Such adoptions seem a commonplace among childless Greenlanders, as a sort of human variant of their ancient communalism. The little girl, who sat on the edge of her bed, regarded with unblinking eyes every morsel that found its way toward my mouth until,

thinking to make friends with her, I offered her some. Without a change in her expression she accepted it.

Olsen and I conversed between mouthfuls about Camp Scott and our work. Then the conversation turned to practical affairs. I was told that it was impossible to reach Upernivik by boat or by sledge—the mails would go out when the weather improved—and that Tasiussak, a northern outpost I had planned to visit because it could be used as a base for a study of Giesecke Glacier, was equally inaccessible. Disappointing as this was, it was forgotten when my thoughts turned to our boat. Left on a floe that a strong wind might blow to pieces or out to sea if the boat itself was not shattered on the ice, it represented possible disaster to the Petersens and much inconvenience to me. How could I really enjoy my stay in Augpilartok so long as the boat's fate remained uncertain?

Presently Andreus and his son came in, grinning, to report on how it felt to be 'home' and on their view of the home town.

"It has come to pass that one is no longer tired," said Andreus. "I suppose you're catching up on the news."

"One has heard many things that will be very helpful," Andreus replied, just to make us curious. And then to flatter me he continued, "Isn't it wonderful a stranger in the village talks so well even the children understand him!"

He added that few of the natives expected that I should be able to converse with them at all.

"You have been my teacher so that the credit is yours," I said, much to Andreus' embarrassment.

Axel then chimed in with a polite query about my lame leg. I told him it would be well in a few days. The dogs were rested and minor repairs had been made on the sledge. Finally our discussion turned to the problem of the beached boat. It was obvious to both Andreus and Axel that I was in no condition to make a sledge journey to look after it. Andreus suggested Karl Petersen, no relative, as a suitable man to accompany him and Axel back to

the floe. Karl Petersen would be glad to earn five kroner (\$1.25) so easily.

The plan was to move the boat over the ice to the nearest island. Because of colder weather since our departure from Natsiorsiorfik, the thin ice should be frozen solid; and Andreus assured me that with practically an empty sledge to drive he could be back in three days at most. This would allow time enough for me to rest my knee and enjoy the novel pleasure of society.

Augpilartok yielded nothing new to my investigation, apart from the fact that now the village had a church. At least an abandoned wooden warehouse had been surmounted by a cross. The third wood structure was Olsen's store, stituated in the midst of the scattered sod huts which made up the rest of a community that, from an air view, would have resembled debris left by a summer tide.

Supper followed soon after my return, with more seal meat and some brew—inevitable accompaniment of meals here. At its conclusion, I surveyed my plate and my host's, ruefully determined that before long I too would be able to leave behind seal bones as shinily clean. Mr. Olsen was too polite to reveal by so much as a look what he may have thought of my etiquette, but any child could have told that an inept qavd-lunaq (white man) had been present.

It soon became apparent that the members of this family were card addicts, and that if I did not conform they would be put to considerable embarrassment during my stay. With the table cleared, each automatically seated himself with his own pack of cards—father, mother, and adopted child—the presence of a visitor recalled only when shuffling had been completed. Mr. Olsen looked at me with a sheepish smile; his wife got up and offered me a seat. I said that I should be happy just to watch. Gratefully they hastened to give me tobacco and beer, then settled down contentedly to play.

Solitaire and a complex native game I had been unable to master—it seemed to combine features of rummy with a local improvement resembling poker added—were favorites in their otherwise limited repertory. Their deep concentration in the task at hand was not disturbed by my entrance into the game. I was a poor student. Finally, a little annoyed at the complication of the one game and the isolation of the other, it occurred to me to mention double solitaire. They had never heard of it! Rejoiced to make a contribution so easily, I outlined the technique. All three listened with rapt attention. Here was something, I could sense that they were thinking; here was something magnificently new and rich in possibilities that could be enjoyed without the effort of learning.

The excitement of double solitaire kept us up until two in the morning.

The next day was Sunday, established by the running up of the Danish flag on the store flagpole, and by the gong which summoned brightly dressed inhabitants from all sides to church. I am sure they must all have been waiting indoors in their holiday clothes for the signal.

On the way to services Andreus' dogs lost him in the crowd. I was greeted with delighted barks when I appeared, and, accepting their company, I started out to climb with the aid of my cane a hill road east of the village. The dogs were in a playful mood and several times jostled me on slippery footing. I was the only living soul in sight. The only sounds were those of bergs twisting their tortuous way through the ice-jammed fjord and the distant howl of a dog. When we neared the church on our return the congregation was singing hymns. To my surprise, several of the dogs refused to accompany me farther. Their ears perked up, they whined, they pawed at the door of the building: among all those voices they had picked out that of Andreus!

As was proper for the village Stranger I arranged to have every-

one in for coffee that afternoon. Mrs. Olsen willingly agreed to serve as caterer for five kroner. Under her capable management the affair became a social event of more than usual significance, a noteworthy innovation being hard biscuits served with the coffee. This was brewed on the kitchen stove in a huge wash boiler, into which a smaller container was dipped to supply the need of guests passing through. Although the callers seemed constrained by my presence, the party may be considered a success, for out of the entire population only two babes in arms failed to visit the kitchen and sit for a while, talking, drinking, smoking, eating, or dunking as age and preference dictated.

I was still asleep Monday when Andreus came in to announce that he was setting out to secure the boat. The morning sky gave assurance of fair weather, the west wind promised to speed him and his companions to the floe and to maintain strong ice for the duration of his trip. Andreus said confidently that he would be back by Wednesday evening.

I spent the day writing my notes, climbing about the hills, and playing with the dogs Andreus did not take with him.

By evening the fair weather disappeared. The wind had shifted to the east and blew a gale. The temperature rose rapidly to more than fifteen degrees above zero Fahrenheit. I thought of Andreus' little party bucking the sixty-mile wind in their faces, the dogs crawling forward with bared teeth and half-shut eyes . . . Or had Andreus put back for the bay at the other end of this island? Hoping to wait out the gale, to start again with diminished food supplies?

As I studied the ice toward the interior of Upernivik Fjord with my glasses, a ragged Eskimo who had approached surprised me by saying, "You speakum English? Me no speakum English, me no savvy English." He began piecing scant English with Eskimo so that I could not catch his meaning. I understood only "one money," "no eatem," "bad." Growing impatient, he burst

into an explanation in his native tongue. He had no food, no money, no chance to earn money; his hut was empty save for wife and children, his nets worn out, his kayak gone. Since the sole exports from Augpilartok were seal hides and whale and seal blubber, I realized that, however this persuasive, picturesque beggar might have been at fault, he was helpless now. When he invited me to watch him spend the "one money" (one krone) he wished me to give him, I could not refuse.

There were only two other customers in the village store when we entered. Rapping on the counter to catch the trader's attention, and giving me a reassuring smile, my companion began purchasing the luxuries dear to the Greenlander's heart—coffee, sugar, tobacco—receiving change back after each purchase, and then, as there was still some money left, rice and flour. Thanking me again, he hurried off home to roast his coffee and to smoke tobacco, perhaps for the first time 'on his own' for months. I learned later from Olsen that an injury had incapacitated him from active hunting.

My host owned a huge, seven-year-old beast named Peter, the first dog with a continental name encountered in Greenland. Peter deserved the distinction. He was the largest sledge dog I have ever seen, larger even than old Tak, since whose death he has been undisputed king of canine Augpilartok. Andreus' dogs held Peter in the respect to which he was entitled. Andreus admired the dog, but in discussing him kept drawing comparisons with old Tak, always to Tak's advantage.

Despite his formidable proportions, Peter was frisky as a pup in the traces, and a remarkably gentle, tractable animal in his relations to human beings. For my benefit he was brought in to be fed. Meat placed under his nose he ignored, turning away his great head to lessen temptation until forbidden to do so, then waiting patiently for the signal to eat. Next, a pail of blood was set before him. When halfway through drinking he was ordered

to stop: up came the massive head in implicit obedience. Peter undoubtedly is the most remarkable dog in Greenland, and reflects credit alike on his race and on Mr. Olsen.

Cards again furnished the entertainment for the evening. The double solitaire developed into triple solitaire with each of us taking turns sitting on the side lines. The little girl, who was being taught to count in Danish, got as far as four when counting her pack, then she relapsed into Eskimo and started over. This brought a howl of laughter from her adopted parents. Olsen explained to me that the native method is still the system that is used in the village, although most employ Danish for numbers above twenty—for which there is rarely need, however.

I lay awake a long while wondering what had happened to Andreus. It was now four days since his departure, and though the weather was again favorable there had been no news of him. During the day I had climbed a hill to get a better view of the fjord to the west, where stretches of open water still remained. Mr. Olsen, who presently joined me, thought that the 'big freeze' could not be far off, and that sledging would be possible in a week or less. It could not be too soon for me. I was anxious to return, though it meant an end to my pleasant rest and opportunities to study the natives.

They were less shy after a few days' acquaintance. Even my petting of their dogs when I accompanied the Olsens on visits was accepted as a matter of course. What could be expected, anyway, of a man who voyaged north yet failed to hunt? They did not hesitate to discuss Andreus' continued absence with me, and on Friday my calls assumed the character of a sectioning of public opinion. Some believed that the party had brought the boat to safety and returned to Natsiorsiorfik. Others thought that Andreus was waiting for better weather and ice on one of the islets east of here. The remainder—of whom I was secretly one—were firm in the conviction that the three men had met with an acci-

dent. I did not know what else to think. Andreus had always been so perfectly reliable, he would not remain away if to return were possible.

All united in declaring that a search party must be sent out the next day. Because I alone knew the route and the exact location of the boat, I should have to go despite my lame knee. I should be escorted by one Titus Thomasen, chosen because of his knowledge of the ice and currents over our projected route, with a team of nine dogs, and no baggage but a small package of food and a kayak. Open water was expected near Natsiorsiorfik: if necessary, one of us could camp with the dogs while the other kayaked to the island.

Worry over Andreus made the day a restless one, but I found the warm air too enervating to wander long in the hills after paying my calls. With the high temperature went a falling barometer and shifting west winds. Mr. Olsen says that a fast-rising barometer irrespective of wind and cloud direction signifies bad weather—i.e., high temperature and poor ice. We shall not have weather to worry about tomorrow, I thought, returning to read Danish newspapers published eight years before.

I had been eating little because of distaste for lean seal meat, which, not cooked with fat as done in Natsiorsiorfik, is not nearly as digestible. Now I contented myself with gnawing back and legs of a ptarmigan whose breast had been eaten prior to my arrival. A short while after, I went to bed and fell into a nervous sleep.

At six I found Titus Thomasen outside the house. The early morning light was too dim for good sledging, but fortunately for three miles we could follow a local hunting trail, invisible except for frequent blotches that were tobacco stains on the snow. I went ahead, since the strange dogs would not obey an unknown driver. The temperature still high, producing slush ankle-deep, and enlarged tide cracks marked by phosphorescent gleams on the wet

snow, forced many tedious detours. Snow clung to *kamiks* and made progress more difficult. My knee, too, remained trouble-some. I felt very depressed as I plodded along, the strange dogs at my side regarding me with indifference or latent hostility, gloomy thoughts of what we might find or be unable to find alternating with waves of rebellious discomfort, and hints of possible weakness from lack of sufficient food. There was only the prospect of disaster to ourselves as diversion: I must keep my mind on my work.

We had been mushing for three sullen hours before it grew light enough for me to see what my silent companion looked like. Titus was a short, swarthy native about five feet two inches tall and weighing perhaps one hundred and forty pounds. Next to Andreus he was the leading hunter of Augpilartok. Despite difficult sledging Titus remained poised; not once did he lose his temper. He used his whip on the dogs sparingly, establishing himself as a competent driver.

At ten we were overtaken by a snowstorm from the west and instantly blinded. There was nothing to be gained by a halt on fjord ice, however, so we pushed on at scarcely slackened pace, frequent reference to my compass enabling us to continue in the right direction. From time to time one of the dogs broke through the ice and we ourselves were wetted to the knees. Even with these handicaps we made good speed, because of the lightness of the sledge and almost perfect luck in stumbling from one open ice lane to another. This may be attributed to entry nearer the middle of the fjord than where Andreus and Axel and I had traveled. The kayak alone gave us much trouble. Over rough ice it had to be taken from the sledge and carried, for a single puncture would have rendered it useless and forced its abandonment.

The snowstorm ceased about noon, but we drove on, staunching our hunger with a little raw seal meat that we ate frozen. A low cloud near the inland ice bore out our expectation of open water at Natsiorsiorfik. The kayak had not been brought in vain.

By two o'clock we reached the broadest, most dangerous channel, the fjord's central current, and there we found the tracks of a man.

Andreus? Axel? Karl Petersen? The tracks ended as abruptly as they began. It was growing dark, and we started picking our way slowly alongside the channel. Of a sledge trail there was no sign. The ice floe on which the boat had been left could not be seen. It was necessary now to use my flashlight to guide the tired dogs; the ice grew rougher, and Titus shook a gloomy head.

Finally we came to a section so nearly impassable that he refused to go farther. Beyond the channel no possible route by ice or water was visible: this was the end, Titus said. Nothing I could say moved him to try. Heavy-hearted, I turned around, admitting the failure of the search. The sky cleared and a pale moon came out, but the return proved a nightmare of difficulties. The temperature dropped steadily, freezing our wet garments, yet we were too discouraged and ourselves too weary to hurry the shivering dogs, who plodded along dispiritedly, tails drooping. In the deceptive moonlight we tripped and stubbed our toes; my knee commenced to throb; the weightless sledge slithered from side to side like a thing envenomed, or threatened to somersault in the air over some trifling hummock and crush the kayak; one of the dogs began slashing at his mates and again and again had to be beaten into tolerance. . .

"Iarpok," muttered Titus. "Teufel!"

Distracted, I did not know whether to laugh or let go the curb on my swollen temper.

As we were crossing a smooth stretch, relaxed for the moment, a crash of splintering ice and the sudden disappearance of the entire team startled me into throwing myself on the sledge. It slid forward, slid, stopped on the brink of the hole—

Each of us grasping it with one hand, Titus and I threw ourselves sprawling on the ice to distribute our weight and reached in to release the struggling dogs, nine bodyless heads now popping up, now doused beneath black water, or worse, trapped under the very ice on which we lay. First a clutch at a furry nape or throat, a backward heave on a climbing foreleg, then, soaked and trodden on by the escaping animal, fishing for another victim. All were gasping for breath, a few whined lamentably. To reach the last one it was necessary for me to hold Titus' ankles while he reached far out and pulled the shivering dog to the surface.

Both of us were panting as we crawled away from the edge, and I was shocked by the proximity of disaster. For a few minutes the dogs shook themselves, rolled in snow, again shook themselves, then trotted back to the sledge with tails flying. I wondered at their courage.

The remainder of our return to Augpilartok was an intensification of the misery that had gone before. The dogs lacked energy to run, and the near tragedy forced caution on us; yet, exhausted and wet as we were, we could not go slowly without chilling. We chilled. We tried to hurry, clumping stiffly along in frozen kamiks, heedless of risk and poor visibility, and in our weakened condition we stumbled and fell, stumbled, and did not care, getting up only from habit and shame. Titus and I took turns leading the way, and falling. As the hours dragged by, the man behind the sledge would doze on the uprights until startled dazedly awake by a rough bump or the anxious cry of the lead man.

About two miles from the island a dog broke his trace and raced ahead. We started desperately in pursuit, for the return to Augpilartok of a single, half-frozen dog would alarm the village and probably cause relief parties to be sent out convinced of a second disaster. It was no use to pursue; more wretched than ever, we gave over and crawled onward in the sick dusk of early morning.

We had dragged ourselves to within five miles of the village when the dogs whined and I saw two sledge teams racing to meet us. The relief party! As they drew near, the dogs set up a clamor that could be heard for miles. There was no time for questions and answers. Ice picks and ropes were shoved aside, and we were bundled without ceremony onto the sledges. Immediately I experienced the greatest difficulty in keeping my eyes open, nor could I have moved if I had wished to. The irregular motion of the sledge, words of the men and the pad-pat-pad-pat of the team drawing me blended into an indescribably soothing effect, like a pleasant delirium, which occasional jolts could not spoil. Only the aching thought of Andreus and Axel kept me from sleeping through the whole trip to the time when all Augpilartok crowded about the sledges crying "Kujonok! Kujonok!" in thanks for our escape from the drowning they had visualized.

Chapter 21

LAST EFFORTS

WHEN I drifted awake twelve hours later, my dreamy ease was instantly corroded by memory of disaster. Andreus gone.

I lay scowling at the smoke-browned rafters. Andreus. And young Axel, and Karl Petersen. Drowned in the black waters under the ice? I knew that all my waking hours were to be tainted by the picture, but I could not escape by sinking to sleep again: I should have to face it.

I groaned, writhing at the weakness. Such waves of pain shot through my swollen knee that my forehead grew wet. I waited for the pain to become tolerable. In the kitchen someone was clumsily allowing iron pans to clang together. It must be late.

With both hands I placed my foot on the floor. For a moment I almost could not stand up. My knee was decidedly worse than it had ever been. I should be able to do nothing.

As the day wore on, my dread increased with the passage of each hour. The weather remained cold, the ice was better; had the sledgers still been alive, surely they would have reached us. . . . On the next day or the day after I would search.

The next day Titus refused to accompany me.

I made Olsen get another man, Tomas Mathiassen. With Tomas I covered the same trail as before, under good ice conditions, but worn by constant anxiety over my missing friends. I had not had a whole hour's peace of mind for a week. When we turned back without sighting trace of them, depression, my weakened knee,

and the resolution and attention exacted by difficult driving, brought me in exhausted beyond description.

The following morning we set out once more, this time toward Kekertarssuak. For long, painful hours we climbed over unexpected obstructions, on and on, until the dogs grew heavy-legged, without results. Nightfall found us miles away from land. The weariness of the day's march, piled on weariness from which we had not recovered, made sleep imperative. But sleep was out of the question. Our sagging bodies somehow would have to be herded back to the village.

Augpilartok was reached twenty-two hours after we had left it. Everything that could be done, had been done. Conscience was satisfied.

Nevertheless, on February 3rd, eight days after Andreus had departed, when even the most groundless hoping-against-hope faded, I made another trip out on the fjord. Ice was forming again in open spots. Mechanically we searched for signs of life. I returned with nothing to report to the worried villagers, determined not to be so weak as to renew the search. When my knee was better I would go back and break the news somehow to Ewa and devoted Susan. The situation had to be accepted.

Chapter 22

RETURN

EXCITED clamor. The dogs had got at the meat and were being driven off. My dream of endless clambering over ice hummocks, up-up-down, up-up-down, was interrupted. . . .

I opened my eyes sleepily.

Eskimo voices filled the room; an Eskimo face was bending over me, Andreus!

"Andreus!"

Andreus. Unbelief gave way to a flood of relief. Pumping his hand feverishly, I stared up at him. He smiled sheepishly.

The Eskimos crowding the room indicated by their questions and expressions that they were glad to see Andreus alive, but there was no excitement. Andreus had returned, safe—that was all that mattered. From Andreus' expression I could see that he had been told of the efforts made to find his party and was ashamed of the anxiety caused us: all must be well. None the less, I asked after Axel, Karl Petersen. He nodded.

Standing beside my sleeping bag, he began haltingly to tell this story: After leaving Augpilartok, they had managed to pick their way to the boat. A short reconnaissance was held, and they decided to drag the boat to a safe place on a near-by island. They were about halfway between Natsiorsiorfik and Augpilartok—why not go all the way? After hours on shaky ice they found a route to Kekertarssuak where they spent fourteen hours in deep snow working their way toward Natsiorsiorfik. Andreus was happy to find all well there. Max was busy with his work and

happy. He sent me a letter. The journey had been so exhausting it was only wise to spend a day resting on the island. That was when the wind began to blow, ruining sledging conditions. It was impossible to get out any distance on the ice to hunt, but the daily catch in nets was better than normal. The dogs enjoyed the rest, and so did Karl. Then when the ice became passable they voted to return to Augpilartok.

Max's long letter cleared up a few hazy points in the narrative. True enough, the weather and ice had been bad; but even with the solid ice Andreus showed no inclination to leave. Had it not been for Karl, who worried over his child, we might have waited much longer.

I took Andreus severely to task—not for his failure to leave Natsiorsiorfik, for that would have been suicide, but because he had gone home at all. The best weather we had had for weeks he had used for a pleasure trip, none knowing better than he the unreliability of ice conditions. His embarrassment grew when Olsen also berated him. Our criticism cut deeply.

We had been victims of the peculiar Eskimo psychology. Family life and the hunt are the most important factors in their existence; other work will be interrupted at any time to gratify these instincts. Until we spoke to him Andreus saw nothing wrong in these actions. In Greenland there is no time, and one day is as good as another. That we should worry over his absence had not occurred to him. He merely followed his schedule of convenience, and it happened to clash with our regulated schedule. It was time I took charge of things.

"We'll return home tomorrow morning," I said.

His dismay was evident. Here he had just reached his native village after months away and a tantalizing visit cut short by the necessity to secure the boat; here he had just prepared to settle down for a pleasant stay, when—

"But ice bad!" he protested.

"We'll see."

"Weather no good. Much warm, snow!"

I assured him that it would be clear. Indeed, the signs were obvious.

"Koportok [one of the dogs] sick—"

"We'll have to leave him behind. Be ready at six o'clock, Andreus, so we can have as much daylight as possible on the ice."

Looking more annoyed than I had ever seen him, he stalked out of the room, no doubt to seek asylum among his friends. I am not sure that he found it, for Andreus is too conscious of his own superiority to escape a certain amount of malice. However, we had overstayed our time, and preparations must be made for the journey north; I had no mind to sacrifice plans or even my own convenience for his!

Morning showed a cloudy sky well on the way to clearing. Our departure was occasion for the whole community to be out of bed to see us off long before the first glimmer of light. Good wishes were uttered by all, but with some knowing shakes of the head. I was all impatience to be gone, myself, and felt immense relief when a cry of "Iu-iu-iu" set the dogs in motion. I looked back at the villagers, already entering their huts. Just then Koportok, the sick dog, broke away and started after us. I knew that he would have no difficulty in keeping up. Now, of the objections mentioned by Andreus, only poor ice conditions remained to be overcome.

Magnificent driving on his part promised to minimize the danger, and almost made me forget the anxiety he had caused. His judgment of bad spots was superb. The ice was the worst yet encountered, full of tide cracks, holes, and weak areas, and the way he maintained control over the dogs, strained the sledge around looming gaps and made rapid surveys of the expanse ahead, was something neither Titus nor Tomas Mathiassen could imitate. Yet despite his near superhuman efforts, all three of us

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broke through several times, and I came close to drowning. I was standing on apparently safe ice while Andreus went ahead to look for a passable route. Axel was farther behind. Suddenly the ice dropped from under my feet and plunged me in shockingly cold water to the shoulders—I had had just instinct enough to fling out my arms and keep head and shoulders above the surface! I clung without daring to raise myself farther, for the least additional pressure would have crumbled the frail ice about the hole, perhaps sent me adrift underneath. . . .

At my startled cry Andreus, yelling to Axel to stay on firm ice, came back on the run, snatched his ice shaft from the sledge, and crawled to the edge.

"Hold strong!" he called. "Let legs float. Don't try to climb out!" I could only look at him without answering.

The dogs crowded nearer, all enormous mouths, with panting tongues. I had allowed my legs to be buoyed up by my light bearskin trousers, and now Andreus slowly rolled me alongside with his shaft, like a lumberman poling a log, and then a few gentle pushes more deposited me face down on the surface of the ice.

I arose trembling with cold and relief. For some time I was too shaken to move.

The rest of the night is not quite clear in my mind. I remember that my heavy furs froze stiff, and that I had difficulty in walking in wooden trousers, yet for all that I stumbled along hour after hour behind the sledge, no longer feeling cold, or indeed anything, after the first convulsive chills had passed. After a while we reached the welcome rocks of Kekertarssuak. Up one hill, down a slope; climb, climb, climb, slip, fall, rise, climb, adjust pack, climb, fall—then Andreus would be shaking me awake at the uprights of the sledge, and before realizing that I had been plodding and falling in my sleep, I would once more doze off. . . .

At times when I started awake I called Andreus "Titus," thinking myself still searching for bodies.

Light of the following day diluted the southern sky when Natsiorsiorfik emerged out of the gloom like a ghost island afloat on the plain. The night's struggle and exposure had so far weakened us that we abandoned sledge and almost all our supplies at the ledge on Kekertarssuak and staggered on ahead of the released dogs who were so weary they followed in our footsteps. It seemed hours before the house appeared and the Augpilartok sledge journey was over.

Chapter 23

THE LONG NIGHT ENDS

THE day after our return I spent in bed. Punishing days on the trail had so drained my energy that it was with difficulty that I got up for meals. Had it not been for my need to regain strength I would have asked nothing better of life than to be allowed to lie quiet.

It was pleasant, resting. The stillness in our cabin, the cherry-red stove, the comfort of my own bunk, Max's solicitude, and complete absence of worry were soothing to exhausted nerves and muscles. I slipped easily into that placid frame of mind in which a man contemplates his recovery from a long illness. I had nothing to do but to do nothing, and be spoiled by my companion.

During my waking moments he massaged my swollen knee and applied to it luxuriously hot cloths. I enjoyed once more the sort of food I liked, and little 'treats' prepared especially for me, but could not so much as contemplate without fatigue the round of meteorological observations he continued to make as before. For the most part, I divided my time between sleeping and dozing. I was little interested in books and only slightly in food, and I fear responded but feebly to Max's efforts to entertain me, and to draw me out on the Augpilartok venture.

On the second day Axel and Max volunteered to return for the equipment we had left behind when we reached the island. Max took with him his sleeping bag, a primus stove, and food, for he intended to spend the night out. They left on foot toward Kekertarssuak at nine in the morning, Andreus accompanying them

across the ice to put them on our trail. From that point Axel and Max would have no difficulty in following our route.

Although weakness still held me I really enjoyed the comforts of our cabin. I had time to take notice of minutiae, savoring what had gone unnoticed: Max had arranged our book and food shelves, kindling wood had been removed from the library corner, the suspension rope for the plotting board had been replaced with a new one, and a bit of weather stripping adorned the inside of the south window. Thoughtful Max had also prepared ready-to-heat meals for me. During the day Ewa and Susan called to comment upon my progress.

Susan certainly is the most likable of the Petersen family. Not only is she the most amiable, but there is about her a refinement of body, manners, and mind that the others do not share. Her unattractive appearance is lessened by a fastidiousness uncommon among Greenlanders. For instance, Susan does not noisily suck tea or coffee as though using an imaginary straw, but drinks quietly. Food carried to her mouth is not spilled over lips and table, nor wiped off with a reckless backhand sweep—when it is necessary for her to wipe her lips she does so daintily with a napkin. Her handling of tableware displays a natural grace not inferior to that cultivated by some. Ewa suffers in comparison; indeed, nowhere in Greenland have we seen the equal for neatness of this northern counterpart of Chaucer's Nonne. Most of all, Susan's superiority stands out in disdain of the importunings that gush from Ewa when attracted by some small article, and in her appreciation for any small favor shown. Max and I have often wondered where she will find a fit husband.

At eight that evening Axel returned, warmed with his exertion, but otherwise quite fresh. He burst into the house with Andreus just as I was putting away supper dishes to report that he and Max had found the supplies we had cached and had carried them part of the way back when Max almost collapsed.



SUSAN



"Collapsed!" I repeated incredulously, in English. I knew that Max's heart was sound, and he had been in good health no longer ago than that morning.

Axel nodded. Max had been on his way to his sleeping bag, left at the halfway mark, when he had had to drop his pack and steady himself to keep from falling. After a short rest he had been able to continue to his bag, where Axel helped him light the primus stove. Max prepared to spend the night there.

It was the first bit of heavy trail work done by Max in weeks, since my absence had forced him to keep close to the station for observations. Andreus and Axel were quite concerned over his condition. I thought their anxiety exaggerated, but under the circumstances it would not do to delay investigation. Axel reassured me that Max was as comfortable as he could be made for the night.

The next morning found me as well as ever, save for a slight stiffness in my knee. When Andreus called by I was dressed ready to accompany him. Axel's account still did not impress me: I was more troubled by our neglect of observations for two successive days.

In about five hours we reached the spot described, a rock shelf protected from the east and north by some huge boulders, and saw Max crawling feebly out of his sleeping bag. Axel had not exaggerated. Max was in a bad shape. So weary had he been on the return that he had lacked energy even to take necessary precautions against dampness, and now was chilled to the bone, moving like a decrepit man of eighty. He grinned, but scarcely could mumble.

I had Andreus escort him back to the island, while I went on for the pack. It was late in the evening when I returned. Susan and Ewa were in the house, administering to Max, several of whose fingers were frost-bitten. He was still very tired and moved with an effort, but it was a relief to find him cheerful.

Max had taken care to keep in good health lately; with rest and warmth his strength would return rapidly.

During the night, he said, he had dreamed of home and the warmth of Michigan summer. Swimming to cool off, he dreamed a bothersome horsefly made him keep diving to be rid of it, but every time his head emerged the pest was there. I was watching the women curiously to see what they would make of his unfamiliar references, and thought I noticed constraint on their part. Presently Ewa took me aside and whispered "Iarpok, iarpok" dolefully. To dream of far-away things was, she assured me, sign of approaching death: Max was to be considered as one already lost. When Andreus came in to see Max and join us at coffee, the doomed man had to repeat his dream once again, word for word, to the accompaniment of mournful headshakes and persistent sipping. Andreus seemed inwardly not to share these forebodings, if the way he regarded Max was indication. However, he said nothing. All of this amused Max, who was aware of their views. Finally Max turned over in his bunk and pretended to go off to sleep. As they filed out Susan and Ewa looked at recumbent Max with sad expressions whereas Andreus gave me a knowing smile that could have been a wink.

But Max did not 'wake up to find himself dead,' though he was still fatigued. His fingers responded to massaging better than had been expected; in a few days he would be on his feet again, as good as ever. Meanwhile, the women hovered over him all day with a solicitude that he considered vastly amusing. Their concern, probably part superstitious, tickled him the more because a result of the Augpilartok trip whereof I had experienced the rigors while he was forced to remain snug at home against his will. Max felt that he was being made the 'hero' of the trip.

For the first time since our return from the village I had leisure to visit the dogs. I wished to assure myself that they had suffered no ill effects, for all of them would be needed on the coming journey north. As Andreus had said, the team was in good condition, except for Hussey, who had been ailing. I found Hussey several hundred yards away from the hut. He was rushing wildly back and forth, back and forth, froth dripping from his mouth. My heart sank. Then the husky ceased his aimless running, lay nervously on his belly, forepaws outstretched, body spasmodically writhing and twisting in an agony of motion. Bringing my lantern closer I saw that his short, harsh breath was gulped through half-open mouth. Hussey's eyes regarded me without seeing. They seemed filled with vague, uncomprehending wonder, stressed by his painfully erect ears; he was like a tense child who cannot understand why he should be allowed to suffer so.

Later in the evening I went to look at him again. His eyes were turning glassy gray, his ears strained even more, yet for all his vagueness of expression he ran with apparent purpose, crouched low to the ground, looking neither to right nor to left, an automaton. He raced from hut to house, lay down, went through the epileptic tremors seen before, rose, sniffed about; then, as if this were an act rehearsed, with the same singleness of purpose in his running returned to Andreus' hut, there to repeat the performance. His behavior now did not indicate pain. It seemed that of one no longer remembering the reason for actions become habitual. Were it not for his appearance we should have thought him almost his normal self, for he answered to his name when called and looked for food in the usual places. But in the dull absence of Hussey's usual fiery spirit there was only too sure confirmation. I urged Andreus to shoot him, but he was reluctant to do so, still hoping that the dog might recover.

During the night Hussey's legs stiffened and his back above the shoulders humped grotesquely. So taut had the skin between his straining ears becone that it seemed as if the skull must burst through. His mouth, white with froth, remained half open, and his eyes stared unwinking as marbles. He attempted to return to

the hut, and his running became a series of jumps on stiffened legs. Then a hoarse rasping sound came from his throat and saliva drooled out in quantities.

Andreus' rifle ended this painful sight, this body wrecking itself without a brain.

Hussey was the fifth dog we had lost. Gallant old Takamuak, Cook on the ice floe, Case, Scott—now Hussey. Five of sixteen dogs, and none of the fatalities an actual trail death! Greenland existence is not conducive to long life.

An exception is Andreus' mother, who celebrated during our absence still another anniversary (which Max acknowledged with a gift of two cigars and a can of brown bread!). How many years this feeble crone boasts cannot be learned for certain. Last fall Andreus told us about sixty-four; Ewa confided to Max that the old woman might be seventy, not less than sixty; Susan believes her grandmother to be at least sixty-five; the grandmother is said herself not to know. Of whatever age, she is old in endurance of Arctic hardships. Almost blind old eyes are half closed behind the patched spectacles; the weather-beaten face is a mass of dry wrinkles exaggerated by her tightly drawn topknot. When she stood up to tend the blubber lamp she straightened her humped back with difficulty. Her bowed form and wispy legs make one wonder how she can last a day. Sitting down, she looks more substantial, yet even then the nervous quaking of her frame keeps her head bobbing up and down incessantly. Her life has been relatively long, yes, but like that of the other broken old men and women seen in every Greenland village, meaningless at the end....

Until snow covered the ground, she spent most of the day outdoors sitting in the sun, cutting and sewing skins for *kamiks* and trousers. Occasionally she climbed patiently in the hills, gathering the winter's supply of grass for insulating *kamiks*. It was always a surprise for us to come upon her, humped in a grassy hollow, as weather-beaten as the brown rocks themselves. Susan alone seemed to take an interest in the poor creature, now and then volunteering to play cards with her.

In the month following the return from Augpilartok we were favored with weather that made daily work in the open pleasant. Morning and afternoon Max and I took observations and studied sledging conditions, for the trip to observe geology and glaciology of the northern part of the district was only a few days away. Temperatures averaging 10 below zero had allowed ice to form on the open fjord, so Andreus was dispatched to his native village to get the latest reports on sledging in the region to be visited. He returned early in the following evening with news of reported good ice and the welcome information that Dr. Rask and Assistant Jensen had been in Augpilartok from Upernivik preparing for their annual inspection trip north weeks ahead of time. This meant that I should not only have the pleasure of seeing my friends again, but have the best of traveling companions on our journey. I looked forward to starting with renewed eagerness.

The first faint glow of the returning sun had been seen at noon on our recent journey. Each day now infused more and more color into the sky and into our lives. At last, on February 9th, the sun flushed in all its glory over the rim of the horizon, an orange dome bursting on us like the last trumpet, waking a dead world to glory. The northern sky blued, a fan of light reddened the dark underside of clouds, tinged snowy mountain tips pink, stirred pain in me at my inability to comprehend revelation. The first dawn finds Adam always incredulous, unprepared. It is like restoration of sound to deaf Beethoven. It is like nothing that can be described.

Max and I, worshipers on a hilltop, savored each lingering ray as the sun sank behind southern hills a few minutes later. When we turned to look at each other our faces were flushed. A new tempo had been given to existence: the memory of brightness remained like the afterglow of music.

And now it is February 24th. The sun today has been visible in

part or in whole for several hours. Plans for the journey are complete. The sledge, reinforced, stands ready. This afternoon it was tried out fully loaded, and glided easily behind the eager dogs. Tomorrow I go north with Andreus; for two weeks, or three, or four—if luck does not fail me. Max will have no difficulty with camp routine. He is expert at observations; I realize how fortunate I am in having so capable a companion, wish that he could join us, that his unfailing humor might lighten the way. . . .

We go out to enjoy the night, our last together. It is a night all black and silver. A quarter-moon shows hazily through banks of stratus cloud and is caught on fjord and snow-covered hills: the rest is darkness. A light breeze over the fjord shivers the moon's reflection into myriad-faceted bands of light; the snow crystals near at hand seem to quiver under its rays. "A man who has lived in Greenland longs to return." Tomorrow I start north.

Chapter 24

NORTHWARD HO!

THERE'S Dr. Rask! There's Jensen!" I exulted, wheeling the sledge into Augpilartok.

Dr. Rask, his friendly face ruddy in the noonday sun, waved over the heads of Eskimos surging around our sledge to greet us. Together he and his assistant shouldered through to where Andreus and I were shaking hands with Olsen, Karl Petersen, Titus, and other common friends.

"How are you?" he said quietly, shaking my hand. "Set to go? How's Max?"

"Fine," I replied. "He's taking over while I'm away, and sends his good wishes to everyone."

"How long have you been driving?"

"Five hours," I said.

Jensen observed: "You got here quickly! Not like your other time—I heard about that."

"We left at seven," I replied. "Conditions were perfect; Andreus and I rode almost all the way." The cold, crisp air had invigorated us so that we had rushed over the crackling snow and solid ice needlessly fast, making a lark of a trip that the month before had exacted two grueling days and nights of struggle.

"Come along for something hot," ordered Dr. Rask.

I saw that Andreus had taken the dogs of our team on the ice away from the village where they might get into a fight, and called to him that I would be back shortly.

The three of us sat down at Olsen's table to bouillon, black bread covered with lard, and tea. The others had already eaten.

"I was north last summer by boat," began Dr. Rask. "We got as far as Kraulshavn—"

"You'll find traveling different now," interrupted Jensen.

"I hope none of my patients has died," continued Dr. Rask. "Seven months are a long time."

"How are things in Upernivik?" I asked.

"Very well indeed," replied Jensen, "although the Bestyrer is worried about ice conditions this year."

"This is the first real sledging of the year," added Dr. Rask. "With the little time I have I don't know how I'm going to be able to visit all my colonies!"

Our conversation moved from sledging conditions, to vital statistics, to Greenland politics. Eskimos came in and went out again while I satisfied myself with reports about hunting, fishing, the dark period, hospital cases in Upernivik, weather, and village gossip. Jensen informed me that the winter had been a mild one, as was evident from reports that had been coming to Upernivik over the Bestyrer's radio. English trawlers fishing off the banks near Godthaab were not forced to leave for more temperate climates during the cold months, but had a profitable winter in southern Greenland.

An hour after my arrival Augpilartok was a scene of utmost confusion. The population had turned out in a body to witness the departure of our northern caravan. There was Andreus' sledge; Dr. Rask drove his own, as did Jensen, while a fourth belonged to a native accompanying Dr. Rask, Karl Möller of Upernivik, whose seven wretchedly conditioned beasts made sharp contrast to the fine team displayed by Hendrik Olsen, our trader friend, making the trip as Jensen's helper. Hunting had been poor in the Upernivik area; many dogs had had to be killed, and the others, Karl's among them, kept on starvation rations. It was no fault of his that the team made so poor a showing, but Karl was accustomed to leading, and seemed much dejected at his lowly position.



Upernivik District showing route of winter sledge journey

The starting signal was given, and one by one the five loaded sledges 'took off,' with a muffled pat-patting of paws. Our route led across Upernivik ice fjord. The light was good, and as we sped northward on excellent ice I felt once more an excited anticipation that I thought I had outgrown. To our right in the distance loomed Upernivik Glacier with its constant rumble of forming crevasses. The fjord was dotted with icebergs, frozen solid into the sea ice. Ahead were three teams, tiny dotted arcs of dogs etched against the expanse of ice extending toward the highlands to the north. The dwindling daylight behind us was awe-inspiring in its fading beauty.

As we approached the north shore of the fjord the caravan came to a halt to greet a lone sledger from Tasiussak, the first to get through to Augpilartok from the north this year. He reported starvation resulting from the bad ice conditions of the previous month.

Similar reports were to reach us regarding other communities. In larger villages having trading posts suffering is usually less acute, since food may be obtained by purchase. To this end a community fund is established by setting aside for each hunter 20 per cent of the money due him on furs and blubber brought the trader, 2 per cent of the salaries of Danish Government employees being added to the fund. Yearly the accumulation is distributed among the Eskimos, not in proportion to what was paid in, nor according to individual wants, but on the basis of the quantity of hunting equipment owned: the more dogs, kayaks, boats, nets, harpoons, guns, the more money!

At first glance this seems rank injustice, enriching the wealthy, penalizing the needy. However, the government reasons that by this method industry in hunting is encouraged and parasitism upon the community checked—particularly necessary where there are a number of naturally philosophical natives in government employ, as at Upernivik. The system is subject to abuse where the

more prosperous natives can control apportionment to maintain the status quo, but on the whole it works well. Those hunters who are most energetic are apt to be both the greatest contributors to the fund and the principal benefiters. Often those who draw out money early are among the lowest sharers when the final division is made. This regulation, designed to make Eskimos reluctant to seek advance payments, has reacted upon the Danes, from whom natives borrow in periods of distress. Since security is never offered, the lender seldom sees his money again. Dr. Rask told me that he was 'out' three hundred kroner the past winter.

Another sledger encountered bore news of hydrophobia in Tugssak, which was not on our route. All incoming teams are halted one kilometer from the village. A dead fox had been found near the village. Dogs had been seen in the neighborhood of the carcass. There were two small tooth holes in the pelt. No blood anywhere. The mystery had alarmed the villagers. The holes might have been made after the fox was dead; if they had, the danger was small. If the fox had died from the bite, all dogs must be kept away. They might all go *pivdle* (mad); then they would have to be shot.

Dr. Rask, who is known and respected by everyone in this region, said that the precaution was a good one. The Eskimo nodded.

It was nearing six o'clock when someone called out, "Naijat!" I made out a dim glow ahead from the colony huts, set against a cliff of rock. So this was Naijat. I had known that the station was small, but the sight of three sod huts more than half buried in snow made our expedition seem almost an army.

Naijat was to be Dr. Rask's first stop for inspection. As his entourage swept down upon the tiny settlement there was the usual howling of dogs and shouting of names, and I had an impression of agitated torches and of an entirely disproportionate number of men, women, and children emerging from the huts, before I lost sight of the station in the darkness behind.

Andreus and I continued on alone for two hours until Iunarssuit, a colony of five sod huts, was reached. Our host here was to be Valdemar Kristiansen, the greatest hunter and teller of stories in the region, and none other than Ewa's father. A short, chunky person, with the bowed legs of a cowboy, he had the true Eskimo's straight hair, high cheekbones, slanting eyes and swarthy skin. But best of all, he had the natives' disposition to kindness and hospitality. Vali, as he was called, ushered me into his house with a flourish of commands to the womenfolk. It was good to get in out of the cold and dark.

At first it seemed as though an entire village was gathered under Vali's roof. A little dazed, I counted sixteen occupants; with Andreus and myself there would be eighteen: the rectangular hut was only twenty-five by fifteen feet, divided into two rooms by a board partition. It was just as well that Dr. Rask's party had stayed at Naijat.

Seal meat was placed in a pot over the blubber lamp to boil, and cold matak given us to stay our appetites until it should be ready.

I clamped one end of the *matak* strip between my teeth, the other in my left hand, and began to whittle away at it with a knife. I was still not as expert as Eskimo children, who once had alarmed me by the apparent abandon with which they brought large knives near their faces, but I cut off strips and talked at a good rate.

Vali inquired about Ewa, Susan, and Axel, expressing great interest in Axel's progress as a hunter. Andreus, who had attended to the dogs and baggage on our sledge, came in to join in the conversation. With the justifiable pride of a parent he furnished further details about Axel's hunting exploits which were not within the range of my vocabulary. Vali gave Andreus a separate harpoon joint that he wanted to send to Axel as a gift. Ewa's mother examined my footwear with great care and finally expressed satisfaction with Ewa's workmanship.

Suddenly the Iunarssuit dogs recommenced their clamor and

our own began to whine plaintively. A moment later Dr. Rask and his native assistant Karl Möller came in. There had been no dog food to spare at Naijat, Dr. Rask explained, and he had judged it better not to deplete our own supply too far. Jensen and Olsen would join us tomorrow.

Vali made him welcome, and we sat down to a satisfying dinner of seal meat and black coffee. An old man now, complaining of pains across the chest, Vali found it difficult to believe that the swift joys of the hunt and long sledge journeys such as ours were no longer for him. I had heard from Ewa many wild tales of bear hunts in which he had sought to maintain a reputation for reckless daring. On several occasions in the regretted days of youthful prowess he had killed, according to his own testimony, white bears whose prints were larger than the mark of an upended barrel and more than twelve inches deep in crusted snow—monsters that must have weighed a ton.

After the meal, Dr. Rask and I stretched out our sleeping bags on the board platform soon to be occupied by twelve others, and began to make ready for bed. I had covered forty-six miles that day. Sleep would be welcome. Yawning unashamed, I removed my trousers, the family watching me with the interest due one who has volunteered to "entertain." When the doctor and I were settled, the men took off their kamiks, while the women, as was proper, fastidiously peeled off in addition several of their many layers of anoraks. All this was to a dreamy rumble of voices, the roof overhead a delirious swarming of feeble shadows cast by two fluttering oil lamps.

Then the oil lamps were dimmed, and my consciousness with them.

Jensen arrived at ten in the morning, as we were finishing a breakfast of boiled seal meat. The population of the house now numbered twenty-two, swelled presently by the arrival in batches of the rest of the village, invited for coffee by our good-natured host.

As we were making last-minute preparations I could see from the sad expression on his face that Vali was genuinely sorry to have us leave. He said he wanted to go, he had the urge to travel. He contented himself with sage advice to Andreus on bad spots in the ice. It was nearly noon when we pulled away from the throng, followed by a child who had to be pursued by its anxious mother.

Our route grew steadily rougher as we wove in and out among some coastal skerries and reached the large island Savfiorik. Vali had advised us to climb the island rather than try to skirt it, because of dangerous ice. A fairly well beaten trail over a gentle incline made the ascent relatively easy, but the descent was another matter. Once we were confronted with a downslope so steep that Andreus had to drag back on the sledge while I held the dogs in check. I scarcely dared glance down at the white slope falling away before me, and at the seemingly uptilted plane of the fjord beyond. Suddenly the dogs slipped forward, spilling me over rocks, and for a shocked heartbeat I expected to hear Andreus, dogs, and sledge thundering down to crash against the fjord. Violent wrenches on my arm—I had fortunately not let go of the uprights—reassured me, and I slid and struggled my way to a footing without further mishap.

A run of fourteen miles had been completed by four in the afternoon, when we reached Tasiussak, a forlorn little village situated in the bowl of an islet bay. Near the shore was a frame structure that Dr. Rask said had been built as an expedition base twenty years previously; farther back were wooden store, warehouse, and church. Around and between the government buildings and the six or seven sod huts wound a maze of beaten paths which testified to the fact that this was the sole trading post in the region.

Except for the trader, old Nielsen, all the villagers are Eskimos. Perhaps Nielsen also should be called Eskimo. For thirty years he has not ventured out of Tasiussak; fifty of his more than seventy

years have been passed in Greenland. How much older than seventy he may be, he does not know; the past has become indistinct to him: in this land "where there is no time" he lives the Greenlander's philosophy. His wife, Dorte, is a native, and they dwell together like any old European villagers. Eskimos from the neighboring villages bring him their blubber, skins, and furs in exchange for the coffee, sugar, flour, and cloth supplied him by the Danish-Greenland Trading Company.

Dorte was a splendid hostess and excellent cook. In a few minutes she made us feel entirely at home and served us coffee and cake, and at supper later potatoes, beans, schnapps, cake, coffee, and cigars in addition to seal steak.

With the aid of the trader's half-breed son, I succeeded in hiring a young man named Knud Bistrup to guide us over the remaining three hundred kilometers of territory to be traversed. Andreus, never having been north of Tasiussak, was not willing to attempt the trails, especially since in this district innumerable hidden rapids oblige sledgers unfamiliar with the routes to drive across islands and round promontories to escape the treacherous currents. With Knud's aid we should have to make no more than local detours. Our guide, although only twenty-four, was old as a sledger and had an acquaintance with the glaciers I wished to investigate, for since his father had died while Knud was a boy he had had the man's task of providing his family with food.

Our caravan now consisted of six sledges. With genuine regret we said goodbye to the Nielsens over a last cup of coffee. The stars were still shining brightly when we waved to the lights twinkling from the houses.

Presently we came to a ruined settlement that aroused my curiosity. On the shore side of the remains of three huts there was a space suggesting that a fourth once had stood there. In answer to my query Knud replied that one night a great wave, set up no doubt by the tipping over of an iceberg, had rolled up the shore,

sweeping the nearest house away and drowning the occupants. The others in the hunting colony, terror-stricken at this manifestation of the evil spirit that strikes at mortals, had packed their belongings and fled. Since the tragedy the place had been one to be avoided.

The officers of the geodetic survey nearly lost their lives through a similar happening last summer. Their schooner was anchored, to their good fortune, in Tasiussak harbor itself, where they were warned by a great shout from natives on shore that a berg had tipped and was sending a huge wave toward them. Frenziedly the Danes upped anchor, started the engine, and headed about toward the open sea. Just as they were chugging through the narrow outlet the wave caught the schooner, swung it up into perilous balance on the crest, and hurled it high on a rocky shelf, where the bow remained when the wave had passed. The stern sank until the engine was under water, and the men were giving themselves and their vessel up for lost when a second tidal wave dislodged the schooner and set it afloat.

One after another, seven sledges passed us on the down trail, all bound for Tasiussak with loads of blubber and skins. No stops were made for conversation because with the excellent weather and fine ice everyone was anxious to make progress. The hurrying Eskimos exchanged data on ice conditions from their sledges, and shouted "Inudluarna!" when behind our backs.

With continued fine weather and better sledging than the day before we made good time over the thirty-mile stretch to Kuk. Our plan at first had been to drive on to Kigtorsak, twenty miles beyond; but bad ice in that direction made it inadvisable to proceed farther in the darkness.

Kuk, meaning 'stream,' gets its name from a five-hundred-foot creek north of the colony. The creek is fed from a fresh-water glacial lake, one of the many which dot every land area.

A stranded aviator familiar with Greenland would have known

at a glance how far north he was, for the huts in this village were about half the size of those in Godhavn. At almost every stage in our progress the huts were noticeably smaller, for the farther north the more restricted the supply of building sod. We had no sooner entered the village than we were politely informed that dog food was so scarce that only the doctor's team could be fed. This would never do. Upon discreet inquiry by Andreus I learned that there was seal meat, but none was for sale. This was the prelude to the transaction, for the Eskimo is a clever trader. He knows that scarcity and demand operate jointly to raise the price of an object.

My bargaining was done with the director of the villagers, who was selected because of his astuteness in business dealings.

"Five kroner to feed our dogs," I said.

"Feed your dogs? Who, me? Oh, no! It happens that a very poor hunter is present. It takes a skilled hunter to have seal meat for dogs."

"I am so sorry," I answered. "We are in great need of dog food, and I knew that you were the best hunter in this vicinity and the only one who would have some to spare!"

"Now I have a story to tell in the winter. The stranger has made a mistake. I am no hunter but a poor, unhappy person. You think we have meat, and we have none."

"I am dejected. I was positive you could help. What do you have in those caches?"

"Nothing that you would want."

"I thought they might hold meat."

"That is a joke. He thought we had meat. No, there is only some scraps we have been saving for our miserable dogs."

After seemingly endless speech I persuaded the man to open the cache. The meat was good, and there was plenty of it. Before we had finished our harangue I had paid him ten kroner and a packet of needles, one of the dozen which I was carrying for just such an occasion.

When Andreus and I received our share of seal meat we drove off about a half-mile to feed our hungry dogs without intrusion. I restrained the dogs, which whined and slavered, while Andreus chopped meat and nibbled frozen morsels and became at last so absorbed in eating that I began to fear for the supply!

Frozen meat is a staple article of northland diet. It is particularly desirable in the morning before one goes out to hunt. Since it must thaw before digestion can begin, and since raw meat digests slowly, hunger is averted the entire day without necessity for packing food along. One must only be careful to avoid overeating, which produced severe chills lasting an hour or more.

For supper that night we had boiled seal, and matak placed on a board in the middle of the floor with the director's ax convenient beside it so that each might hew off as large a portion as desired. The director kept going in and out of the house, and every entrance was announced several times by his wife who referred to him as the piluk (detestable). Eskimo women speak of their husbands as terrible, horrid, or frightful to indicate their importance as persons. The "detestable one" ignored her remarks, getting full satisfaction out of his role as host.

Here we were interrupted by the entrance of the director's son with two wet seals and a fox. The *matak* board was moved to one side, and the rest of the floor used to skin the fox and flense and clean the seals, whereupon we were joined at dinner—some of us were still gnawing *matak*—by a bitch and a large litter of pups, who had kept eager eyes on the proceedings and now buried themselves in gory entrails.

Bitch and pups were housed in the cave beneath the platform bed, the customary lying-in hospital for Greenland dogs. Here they are safe from fellow dogs, and can retreat even from men. When I reached out for one of the sprawling fat balls of fur its mother rushed up with bared fangs, forcing me to drop the pup hastily, upon which it was driven back into its home. To this scene of carnage the village ill were to come for treatment by Dr. Rask. First to enter was a middle-aged matron, obviously suffering from the "white plague" brought in many years ago by a visiting hunter who infected the children. Sod huts with their damp warm air, crowded with men, women, and children of unsanitary habits, are hothouses for tuberculosis. Until Greenlanders radically change their mode of existence there is small hope of eradicating the disease.

Throughout the examination Dr. Rask was assisted by Karl Möller as an interpreter. The doctor did not want to make the mistake of misunderstanding or misconstruing a statement although he had an excellent command of the language. The stethoscope was the accompaniment of every diagnosis. Thumping the chest area and asking the patient to *ah*, or breathe deeply, was a serious procedure, and no one in the gallery broke a smile.

"Are there others in the village in need of my help?" asked the doctor as his patient was about to leave.

The Eskimo stopped and thought. "Imaka," he said.

Dr. Rask, wise in patience, waited. Soon another patient entered, a man. He too did not know whether there would be others. "Imaka." Always cautious in not committing themselves.

Whenever a treatment is finished, the doctor explained, there is this pretense of uncertainty; but at any move to leave, he is stopped by someone in need of attention. Sometimes he has everything packed ready to start before he is advised of another patient!

A number of villagers eyed me with furtive curiosity—my reputation had preceded me. I was an angakoq, a medicine man, a magician, who sent balloons to Heaven to learn about coming weather conditions from the Maker, and who was responsible personally for the unusual lack of heavy ice that season; who, moreover, predicted that ice would not form in Upernivik before February! How the prophecy affected my popularity, I had no way of knowing. Certainly, whatever resentment might exist

here was nothing to what Upernivik felt, if so sophisticated a town could be taken in by my scheming. Would that a scientist were as much respected back in the States!

Chapter 25

TOWARD DEVIL'S THUMB

KARL MÖLLER was having trouble with his team. We were not an hour out of Kuk before the pace began to tell upon his starveling dogs. Unhappily, Möller yelled at the poor beasts and lashed their gaunt ribs in an effort to keep up; but it became necessary for the rest of us to mark time at ever shortening intervals to avoid leaving him behind.

Finally, Karl could stand the humiliation no longer. He shouted to us, and we came to a stop. With an expression of complete frustration he announed his determination to return to Kuk. That would never do, so Dr. Rask, who had kept his team fat on imported whale meat, offered to lend two of his best huskies. The dogs reacted with a violent howl of protest to this dictatorial exchange of populations! At the "S-s-s-sik!" which started off the doctor's sledge, the two left behind renewed their mournful complaint. Their former mates turned to see whether help was needed, the sledge piled up on them, and the dogs, rendered furious by the entanglement of traces, struggled desperately to return to the 'rescue' of their friends.

The doctor unraveled his team at last, and requested Karl to silence the deserted pair while he made his own way forward nearer the head of the column. Andreus' team, superbly conditioned by our many trips to the inland ice, retained the leadership, with Knud, our guide, jointly setting the pace. The Greenlanders' dogs were notably hardier and more fearless in skirting tide cracks and currents than the less often exercised dogs of the Danes.

We had fast sledging for four hours, then ran into an area of almost impassable rough ice which brought us all to a halt. At sight of their former mates the transferred dogs renewed their howlings. The rest of Karl's team showed no signs of hospitality but growled menacingly at the intruders.

With the direct route to Kigtorsak interrupted, we were obliged to detour far eastward to the very edge of the inland ice. In traversing several small islands the way became extremely rocky. The sound of our progress was one of squeaking and grinding runners on stone.

We were now within a few hundred yards of the great Ussing's Glacier, an arm of the Greenland ice dome. The sea front was a cliff of ice one hundred to one hundred fifty feet in height, running along Sugar Loaf Bay for about five miles, uninterrupted save for a nunatak, or rock island, which, like a gigantic wedge, split the advancing ice river some third of the way up from its southern end.

When smooth fjord ice was regained the sledges were tipped and their runners filed. During this interval I photographed the glacier front and took a few sights on it, which gave me data as to its size. We refreshed ourselves with steaming tea after the Eskimos had finished their task; then Dr. Rask's and Jensen's party swung west to Kigtorsak, while Knud, Andreus, and I continued along the ice front.

Deep snow everywhere bordering the glacier prevented close inspection of its lateral margins, except at sea level. Viewed from a mile away it was apparent that the glacier's sides, where they impinged upon the land, were almost vertical walls. Near sea level the lateral slopes ended in a moraine of heavy boulder clay colored with pebbles of granitic gneiss, quartzite, and red granite, and streaked with darker grains of garnet. Between the nunatak and the northern land margin the ice rose in great circular mounds cracked with fissures, and three or four hundred feet across at the base. Along the northern wall a lane five hundred yards wide, free

of hummocks or crevasses, extended into the interior as far as eye could see; an imperial highway beckoning the explorer.

To the east rose a second nunatak, a mountain peak like a volcanic island above that sea of ice. Westward, Sugar Loaf Bay was dotted with rugged islets, and mountainous larger islands ringed it about on all sides. The bay itself was remarkably free even of small bergs and broken ice. This indicates that Ussing's Glacier moves slowly, more slowly than the south arm of Upernivik Glacier, which 'flows' seaward at the rate of about two feet a month—too leisurely ever to discharge a large iceberg.

Leaving the glacier, we headed northwest, then northeast again across the bay to Itivsalik, our destination for the night. Forty miles had been covered before we ended the day's journey on the barren south slope of a small island where five huts lay like scattered dice. There we were surprised to find Dr. Rask and Karl, who had not been able to go on to Kigtorsak after all and would spend the night with us. Jensen and his companion had gone on to Kraulshavn for lack of local accommodations—our own party would have had a crowded time of it!

The village director, a squat little man with jet hair and a jovial smile displaying admirable teeth, supposedly the heritage of all Eskimos but conspicuously rare since the introduction of sugar, welcomed us into his hut. This was a structure ten feet square, housing nine of the colony's thirty-five inhabitants. It is true that we found the quarters somewhat cramped. However, we were to pass a comfortable enough night.

Our host was well pleased to have two white men as guests, which speaks volumes for Danish wisdom in the administration of this province. When I unpacked my instruments to see whether they had suffered any injury in transit I found the director watching my every move, fascinated by bright metal and glass, and childishly eager to handle them all. He was the first Eskimo encountered to show curiosity about the mechanical details of my

equipment. I took him outside to show him the magnifying power of the telescope of the transit. This was a mistake because immediately he started bargaining for it. Finally, in desperation, I promised to send him one of the inexpensive telescopes sold in the larger colonies. Dr. Rask, highly amused, decided to leave his equipment on the sledge until the following day.

En route from Kuk, Andreus had reported that the director was a versatile story-teller. It took very little encouragement to get him started now, for he was conscious of his reputation and missed no opportunity to preserve it. His simplest story was enlivened by evocative details. The art was something between that of the raconteur and that of the pantomimist, perfectly fused, primitive as that of our cave-dwelling ancestors, yet satisfying, even thrilling. His recital was in a low monotone, but so much was communicated by the smooth, expressive gestures of his hands that had I understood no word of Eskimo I should still have been compelled, in his account of a bear hunt, for instance, to creep with him up to the animal, to sink cautiously upon the ground, rise, take aim, fire, and—triumph!—rejoice in a glorious direct hit! I sat back amazed at his unexpected artistry.

Pleased with this amiable Greenlander, I did not wait until morning to try to repay his hospitality. I offered him five kroner. He smiled and shook his head. Although he was acquainted with the value of money, he preferred our alternative gift of coffee and sugar. (Coffee alone must never be given, for what is coffee without sugar to put into it?) This acceptance of repayment must not be thought a cheapening of hospitality. On the contrary, without it hospitality would be difficult, for since a strong foehn may in a few hours isolate a community as completely as a desert island, supplies must not be allowed to diminish too far. The director was wise in refusing money: he lacks easy access to a trading post. However, tobacco given him for his own use rendered him so grateful that he offered me his wife as a convenience for the night.

She, meanwhile, occupied herself in dressing the children in their best furs, for Dr. Rask will make his examination tomorrow. As always, I was much impressed with the affection Eskimos lavish upon their children. As might be expected, there is no surer way to ingratiate oneself than by friendliness to a child. When an infant was brought me for inspection by our host's wife my comments on its sturdiness, and the fine furs it wore in preparation for the doctor's examination, made the mother touchingly concerned thereafter for my personal comfort. Certainly the Eskimo parent is devoted to his child! Disregard of Dr. Rask's injunction against something not conducive to recovery of sick offspring is answered truthfully by the statement that they can refuse their children nothing! (The same interpretation holds true for wayward Eskimo maidens whose generosity does not permit them to see difference between day and night.) On the other hand, when the doctor administers medicine it is taken without a sign of emotion by even the tiniest Greenlander.

The most surprising of Dr. Rask's observations is that natives dread the sight of human blood. It is not uncommon for a man to faint when a single drop is drawn from his ear. Doubtless this is the outcome of hunting experience, in which bloodletting is identified with the animal's subsequent death.

Before turning in for the night Dr. Rask and I stepped outside for a breath of air and a last-minute inspection of the dogs. We were especially concerned about the two dogs loaned to Karl. In the team they were considered outcasts still. At feeding time a club was needed to insure them their share, for left alone the other dogs would have mobbed together to drive the 'intruders' away. That night, we found the two literally sleeping in each other's 'arms'!

Another instance of the stringency of dogdom's political code is afforded by a dethroned king dog in Jensen's team. This handsome animal had been sick two days during the previous winter. In those

two days he had lost his position, so quickly does leadership based upon physical fitness change. Now he has degenerated into an unhappy, sneaking cur, lacking confidence to fight his way back, bitter at man and beast, growling and snapping at the approach of either.

I could not await the usual waking time of the villagers but said goodbye to Dr. Rask and my drowsy host, and with Andreus and Knud left Itivsalik at three o'clock the next morning, with the temperature at thirty below zero and the west wind blowing a gale off the sea. The stars flickered in the inky sky. Stiffly, the dogs broke into a run, their eyes narrowed in the wind. The cold air had an invigorating effect upon us, and it was not long before we were fully awake. The crisp snow crackled under our feet, and the runners of the sledge squeaked an accompanying tune as we thrust into the gloom.

Presently Andreus turned his team off toward Kraulshavn as agreed, in order to give his tiring dogs a rest, while Knud and I sledged on toward Cornell Glacier. As we approached, the wind shifted in direction, and we ran into a driving blizzard that staggered and nearly halted us. Snow stung our faces until their windward sides were as cold as the layer plastering them. The dogs humped their backs against the blast, struggling valiantly on but almost drowning in deep snowdrifts, from which frantic efforts were required to rescue them. Visibility was limited to a few rods. It would be useless to attempt observations. I would camp for the night on the ice, saving the dogs and ourselves from needless punishment.

Knud looked at me so guiltily upon hearing my intention that, in the midst of the roaring storm, I was tempted to laugh. When pressed for explanation, he replied that he had left his sleeping bag on Andreus' sledge—a lack of foresight characteristic of Greenlanders. There was nothing to do but make a run for it to Kraulshavn, the wind at our back.

When the dogs started off again they were brought to their knees by the sledge, stuck on the rough ice. Knud gathered the traces in one hand, uttered an encouraging call, and suddenly let go. The resulting jerk sent the sledge bouncing after the dogs.

The twenty miles to the village were covered in eight hours. No stops were made for food or rest; we sustained ourselves easily on the *matak* eaten before the start. Otherwise we were less fortunate. Knud froze both cheeks, and though I escaped this through my leanness, my feet were frostbitten so that I could scarcely stand on them.

It must be admitted that despite occasional carelessness Knud lived up to his reputation as sledger and guide. He had trained his dogs never to gallop, with the result that they maintained a fast trot mile after mile; and they had learned to obey his every command so well that he seldom had reason to flick his whip. Knud was particularly expert in selecting trails, displaying almost uncanny intuition in dangerous areas. The country, he knew almost too well. He was forever halting the sledge to retail an endless Eskimo name for each little island, snow field, or glacierlet passed. Most of the names sounded alike to me, and I could have sworn that he pointed out at least six umanaks (heart-shaped mountains) during the run. The most trivial features of the icescape seemed to have the longest, most pretentious titles, perhaps because, really having none, they required "description names."

My watch showed twenty-one hours had elapsed since leaving Itivsalik when we pulled into Kraulshavn in the midst of howling dogs. Andreus, Jensen, and Dr. Rask were the first to greet us. Observing my lameness and Knud's face Dr. Rask ushered us indoors while Andreus took charge of the dogs and sledge.

Forty-five years ago, when Ryder was exploring West Greenland, there was no human habitation this far north. Growing scarcity of game causes whole villages to be abandoned as huntsmen and their families pile clock, gun, telescope, and other treasures into kayak or onto sledge and wander on to new hunting grounds. In a few years it may again become necessary to move, perhaps back to the replenished territory, more often farther north. The latest and most complete maps furnished to Max and myself on our arrival in Godhavn show many villages now abandoned and fail to show a corresponding number of new settlements. Even on Natsiorsiorfik there were ruins of a village that might have housed fifty to a hundred Eskimos.

The true nomads of the northwest coast during the winter concentrate in tiny outposts such as Naijat, Kuk, and Itivsalik, located where hunting is good. Such stations served by larger coastal colonies cover a wide area remote from villages. The men are absent even from these forlorn camps for weeks at a time on sledge trips from which some never return. In late summer and early autumn too long journeys are made for food. When I was at Mt. Evans there were Eskimos in the district in search of caribou who had paddled their umiaks more than a hundred miles from their native Sukkertoppen.

In recent years wholesale migrations have been interrupted to some extent by use of more efficient firearms and improved means of transportation. Yet the northern trend still continues. In 1921 Kraulshavn—located well over a hundred miles north of Upernivik—was established as an advanced trading post to supply nomadic hunters. Already Eskimos have swept so far past that there is talk of establishing a store in the inaccessible Devil's Thumb area itself, latitude 74 degrees 35 minutes north; and the time may yet come when men will hunt seals throughout the length of Melville Bay.

Hans Neilsen, the local trader, and son of the Tasiussak patriarch, who had been our host a few days before, prospers so well in this remote region two thousand miles north of Boston that he lives in comparative luxury, is able to keep schnapps on hand for visitors, and owns a new portable phonograph with ten Danish records in constant use for the amusement of his people!

Eskimos are attracted by this white man's music and are to be heard all over Kraulshavn humming or whistling it. My own whistled tunes were picked up on short notice, as often happened elsewhere. I have even gone out for a stroll, whistling for my private edification, and on returning had my tunes flung back at me in chorus. However, the older Eskimos, particularly old women, prefer their native cradle songs, which have a range of only four to six notes, being composed for drum accompaniment. The tone is mournful, in its monotony almost elegiac, revealing the Arctic, where hardship and privation outweigh joy.

Dr. Rask vetoed my proposal to leave with only a few hours' sleep and insisted that the entire party spend the day resting. It was a day in heaven for everyone: we slept late and stirred only at mealtime. We saw very little of Knud, who spent the day visiting relatives. This added another feature to Knud's serviceability that had not been mentioned before the start. Complicated Eskimo sexual relationships have given him blood kin in nearly every village entered from first to last, enabling us to secure food for his team and Andreus' when it was not available to others.

At the table that evening, when schnapps were served to everyone, I learned that the Greenland word for the drink signifies, 'There is no more world.' *Nepenthe*. Perhaps it was the schnapps that made me see so much significance in the phrase.

Chapter 26

RAMPARTS OF THE ICE KINGDOM

THE next morning the weather seemed so bitter that I retreated into the hut, wondering whether I had overexerted myself two days before. Knud too made a wry face when out in the open air. It was hot in the hut, 80 degrees on my thermometer. I placed it outdoors and watched the mercury drop and drop—41 degrees below zero—the coldest weather I had experienced in Greenland!

We set out grimly. The wind bored into one's bones, and whirled snow crystals hard as diamond dust into eyes, nose, and throat. Despite vigorous sledging we soon chilled, and I was forced to run to avoid frostbite and the danger of numbing. It seemed that, if I should stop, the atmosphere would congeal around me like ice about a trapped vessel; then I would run again until my lungs ached with the burning-hard air.

Most of the way lay over open fjord, where the wind pressed upon us steadily like a weight. Fortunately, a fifteen-mile run brought us to Ikermiut, a summer boat station a short distance south of Holm's Island, where we could warm ourselves. Knud, wiser from yesterday's experience, had taken better precautions and was unaffected by the cold. Andreus froze his nose and had to thaw it out over a blubber lamp. My feet bothered me only slightly, but I did follow Dr. Rask's advice and changed kamiks during our brief stop. The purpose of this was to avoid the freezing of any moisture that might have accumulated in them on the run from Kraulshavn. We were given the usual warm welcome by the

men of the village. They seemed shorter in stature than those farther south.

Crossing Nugssuak Peninsula, we had run over several spots swept bare of snow and the runners of the sledges needed filing. Dozens of willing hands helped unload the sledges, tip them over, file the runners, and reload. Knud and Andreus took the further precaution of icing the runners on their sledges.

While Dr. Rask went about the ritual of making his health examination I decided to get information about some glaciers on Nugssuak Peninsula which I hoped to investigate. We had crossed the peninsula shortly after leaving Kraulshavn, but because of the heavy mantle of snow had seen no traces of local glaciation. I beckoned two of the more intelligent-sounding men to me and began warily to question them concerning icecaps and valley glaciers in that vicinity—I did not wish to 'put answers into their mouths.'

"Are there any sermeq [glaciers] over there on Nugssuak Peninsula?"

The shorter of the two nodded.

"How many?"

"One sermeq." And its location was pointed out to me.

"Is there any place where snow stays throughout the year?"

"Yes, several places."

"Is there ice under the snow?"

"Yes." A nod, too.

"Is there more ice now than ten years ago?"

"Yes." And a smile.

"Does the sermeq reach to the sea?"

"No."

"Did it reach the sea ten years ago?"

"Yes." An obvious contradiction.

And so on, for the better part of an hour. Result: what I already knew or suspected—that there were several glaciers on the penin-

sula, and that one described by Tarr in the American Geologist in 1897 apparently has shrunk considerably. Some years ago, the men assured me after much questioning and a little difference of opinion, the ice rim touched the fjord, and large chunks broke off. Now, the front of the valley glacier had melted back several hundred feet and gave birth to no floating ice. Some years there had been much snow, some years not so much. Curiously enough, the Eskimos had failed to note any correspondence between snowfall and the extent of the glacier, and when I pointed out the connection they only smiled. After all, didn't they give the answer I wanted?

Toward evening, battered dogs and men alike, we crossed the sea ice toward the icecap and reached Igdlulik, the last village we expected to see before driving to Devil's Thumb. Here we were taken to the hut of Tomassuak, or Big Tom, a man well known in northern Greenland. Despite his name Tomassuak was one of the smallest men I had seen. I was struck by the sparkling eyes and melodious voice as he welcomed us. Though cordial, he seemed sensitive and proud; a man above the average in intelligence, and far superior to southern Eskimos. The farther north one goes, the more individualism and independence among the natives. Tomassuak, for instance, was not accustomed to serving white men, or even to seeing them.

Our arrival filled Big Tom's tiny house to capacity. I had to stoop in the place, which my eye hastily measured to be about twenty by fifteen feet in ground plan. Even when empty its atmosphere was tainted with the smell of damp sod, burning blubber, and rotting skins. When twenty occupants were crammed inside, the odor and heat of perspiring bodies, added to the smells already present, made the atmosphere almost unbearable. Into this steaming hut our baggage was lugged; and places were cleared for us on the platform bed. I was to spend the night squeezed between Dr. Rask and Jensen. Andreus, Knud, Karl, and Olsen were to be guests elsewhere.

As soon as we entered, more seal meat was dumped into the single pot, and we were invited to help ourselves. Missing from the menu was the inevitable matak. Tomassuak explained that the white whale had not used the regular migratory path the previous fall because of the mild weather, and they were deprived of their winter supply. As I was hungry I watched the progress of the meat pot with interest. For a while the blubber lamp refused to burn unless the door was opened occasionally for a draft of air. Then, or whenever anyone passed in or out, the dying flame would revive and cast a startling glow on every brown face and gleam in reflection from every eye. Later the air became almost unbearably close as the door was kept shut. I knew that I should have a headache in the morning.

One of the villagers, Jonas, had killed a bear during the day and was invited to celebrate over a cup of coffee. Jonas had a reputation for being a braggart. Little persuasion was needed to induce him to give an account of the kill. His first warning of a bear in the neighborhood came when the dogs he was driving swerved from their route toward the icecap and began barking. This is an unfailing sign, for the Eskimo dog barks only when he scents bear. Shortly they were upon the beast, which had reared to protect itself from the rushing dogs that were by now cut loose from the sledge. Before Jonas could shout, the dogs had leaped into the fight. The bear circled and moved about, as agile as a cat. His huge paws swung dangerously close to the biting, snarling, and tearing team swarming over him like ants. One dog was tossed high over the bear's head but when he lit returned to the fray without even licking his wounds. Another was not so fortunate and landed stone-dead.

Jonas was in a frenzy for fear of losing his entire team. Shooting the bear was out of the question because of the danger of hitting one of the swarming dogs. He decided to use his sealing harpoon and charged into the melee. The spear was imbedded over the bear's right shoulder, but still he struggled. Finally, in desperation, Jonas used his gun and fortunately hit the bear over its eye. It surrendered at last; falling down with twelve dogs snarling over its body. Too weak to raise a paw in protest the bear died quickly. Recognizing a defeated antagonist, the dogs loosed their grips and went off to lick their wounds and await their reward.

Throughout this recital I watched Knud, who seemed to be growing restless. Finally, while Jonas was elaborating upon the heroic role he had played, Knud lost patience.

"How many bears have you killed?" he asked Jonas.

After some deliberation, Jonas professed to have killed three.

"Well, well, isn't it wonderful to know a man who has killed three bears!" said Knud, with an air of sarcasm.

"The skins brought thirty kroner," continued Jonas with his bragging, the sarcasm having gone over his head. This was too much for Knud. Glaring at Jonas, he said:

"A hunter who has killed only three bears is only a child. A man keeps quiet until he has something to boast about."

"Time wasting is to make a person impatient," interceded Tomassuak, seeing the atmosphere was getting hostile.

Soon conversation returned to normal, and I started questioning my host about conditions to the north, and especially toward Devil's Thumb. I learned that an Eskimo family that had settled near its base had not been heard from since the sea ice had frozen. Jonas admitted that he had been rebuffed in two attempts to penetrate that area. Everyone advised me against an attempt to travel farther toward our objective.

To give up, only twenty miles from Devil's Thumb! Unthinkable!

The decision was forced on me, however, though I had set my heart on reaching that area. One consolation was that Devil's Thumb as a goal was merely nominal, for I could add nothing of scientific value to previous surveys of the region. In any case, we

could not break through. The trail had been growing continuously more difficult as it was; the steep slopes would exhaust the dogs; but, most important, food was lacking. Even in this secure little village, dog food was scarce. Farther north, we should have to resort to the rifle, a none too dependable source in strange country. There was no help for it; we should have to head south.

I awoke from fitful sleep to a medley of snores. Jensen beside me on the crowded platform bed was jamming his knee against my leg. It was pitchy black in the hut. The blubber lamp which should have been kept burning had gone out—a bad omen. I smiled wryly in the darkness. My head was throbbing from stagnant air and blubber-oil fumes, and I had that queer feeling of uneasy emptiness inside which is like being haunted.

Cautiously I crowded out of my sleeping bag, stepped over the recumbent forms of twelve companions on the platform and went outside. The sky was full of stars. The air, achingly cold, stirred resentment in me, so that at least I felt alive. Should I go on to Devil's Thumb, regardless? I had promised myself that I would! But that was mere vanity: I had no right to risk lives, Knud's, Andreus'—how Susan would grieve! and Ewa. I had no right to risk my own life, and what is more, at heart did not wish to.

Knud and Andreus were already outside waiting for me with the dogs in harness and the sledges packed except for my equipment. Andreus crept in and out of the hut for my baggage without awakening the household. Again it was necessary for us to get an early start, for our route would take us to Cornell Glacier. We had paid for the night's lodging with the customary coffee and sugar before retiring. Dr. Rask, Jensen, and party were returning directly to Kraulshavn, where we were again to meet them.

It was a cold, depressing day on which to start the return. Even Andreus, usually so phlegmatic, gazed around with dour suspicion of Nature's malignity. I heard Knud murmuring over the frozen traces. The prospect of forty-five strenuous miles of travel to be

completed before night found me in no mood to make an effort, burdened as I was, moreover, by persistent headache. Oh, hell! Oh, well! When the outlook was as bad as this, the only thing was to laugh. Max, had he been along, might have laughed me out of my gloom. . . . I should have to try to grin and bear it and not make a spectacle of myself before Knud and Andreus.

Our departure was unnoticed, except that some dogs stirred restlessly without bothering to investigate our activities.

We sledged in grim silence over fjord ice rough with hummocks, rounded the high Patorfik promontory, and approached Nugssuak Peninsula at its narrowest, close inshore. We should have to cross the Peninsula in order to reach our objective, and made for a steep valley about which we had learned from Eskimos. Now the barrier opened before us, and we thundered into a railway cut with rock walls rising sheer on either side. The sky turned sudden indigo. The muffled roar of our passage, an illusion of terrific speed, whirled my blood tingling through my capillaries. Knud kept glancing up nervously. Was this chill trench the haunt of some quivitut who had perished here? Surprised at my impulse to lash the racing dogs, I sought to close the space between me and the others. Just then the walls fell away, and we emerged on Ryders Fjord, not three miles from Cornell Glacier.

Even the Eskimos were awed by the immensity of the scene. Here at last I should be able to salvage part of the time and energy expended on our journey. Here I should be able to determine the location of the ice front by triangulation and photographs and get more evidence on what the stirring giant was doing, whether retreating or advancing. Hastily I climbed a near-by hill to view the scene and orient myself according to photographs supplied by Mr. Kindle of the Cornell party which accompanied the Peary Expedition in the summer of 1896, and spent a month in this locality.

Cornell Glacier, like Ussing Glacier, is a double one, divided

near the northern boundary by a partial nunatak named Mount Hope. The sea frontage totals six miles, of which one and one-half miles are north of Mount Hope. Tarr had not endeavored to determine the rate of movement, but merely inferred from the amount of ice coming from the front that it was not very rapid. From my vantage point it became apparent to me that Tarr was right in his observation. Through my field glasses I studied the surface of the glacier. No moraines were visible on the surface, but a lateral moraine was being deposited on the southern land margin. A nunatak described by Tarr as just becoming visible in 1896 was no more prominent. Since it was located in a position which would make it peculiarly sensitive to any fluctuations in the position of the ice front, it was obvious that there had been no appreciable change.

Directly east from Mount Hope, the central inland ice field fades into the horizon. I took several more observations and photographs of it and landmarks to the south. The atmosphere grew hazy; I felt the strong wind pierce me with its cold, and shivering a little, it may be from a feeling of hopeless insignificance, I packed the surveying instruments and photographic equipment and climbed down.

As we drove together up to the glacier front, turmoil was left behind. A thousand feet above, a torrent of snow blasted over the ice river's brink indicated a fierce gale sweeping across from the east. Yet, though spume floated down from the dazzling snowfalls, in the shelter of that pale precipice no breath touched us, nor did any sound mar the deathlike peace save the irregular panting of the dogs and the breaking of crusted snow under our sledge runners. Our animation seemed alien, unseemly, against the huge, still background. In the midst of dogs and men I felt our party to be no more than an impure speck. Never before had the Arctic shown itself to me so desolate, so dreadful in its immense sterility. The roughness of the sea ice due to broken ice from the ice cliff

made sledge travel almost impossible within a lane about a mile in breadth bordering the entire ice terminus. A short distance from the outer border we came upon the ruins of a hunting camp. The faint outline of the hut was all that was visible in the deep snow. Even here, in the blank face of the glacier, surrounded by a desert of rock, ice, and sea, man had claimed a portion of rock for his own, built a house, had children, struggled to support life, like elementary creatures able to subsist on bare minerals! Wonder filled me at his courage, his presumption.

Unconcerned, Andreus continued uphill to pick chunks of ice to melt for drinking water. More than once I had warned him of danger of infection—it is customary to bury the dead on slopes overlooking the settlement, and from these slopes usually arise the streams used as village water supply. Thus the dead infect the living, men and dogs alike. Another danger is the spread of germs by dogs which eat the excrement of a sick man. This is particularly serious, for if a dog has typhus with the attendant ailments little attention is paid to it. The hands which gather ice for drinking purposes are the same that harness and unharness dog teams, which may be bacilli carriers. Some years ago a typhus epidemic which originated in Pröven was carried by dogs up and down the coast from Upernivik to Egedesminde, and in that belt of three hundred miles many had died. On Dr. Rask's advice I always boiled drinking water myself to avoid the ever present danger. But Greenlanders ignored the troublesome precaution with the same courageous indifference that led hunters to build in this forbidding spot.

The day promised to darken early, and I made haste to complete my survey. We had no time to dally, for I was anxious to return to Kraulshavn by sledging along the north coast of Nugssuak Peninsula, which meant we should have to cross the peninsula twice: first to reach the north shore through the passage we had used earlier in the day, and then back to the Kraulshavn side over the route used when traveling from Kraulshavn to Ikermiut. This was necessary if I was to visit the valley glaciers on the north slope of Nugssuak about which I had questioned the Ikermiut natives.

When I divulged my plans to them, Knud and Andreus demurred. The dogs were tired, and we were several hours' hard sledging from our day's destination. When I proposed to camp for the night then and there, get up early the next day, and continue to Kraulshavn, they decided to carry out my original plan. We crossed the peninsula and sledged beneath the frowning heights along the north shore. I found the valley glaciers and made some hurried measurements. One of the glaciers was deeply incised with ravines probably worn down by run-off water which ran roughly parallel to the direction of movement.

It had been dark for three hours when we crossed Nugssuak from north to south for the last time. Then we heard the dogs in Kraulshavn howl their distrust; the natives were warned but knew whom to expect, and only a handful of children dashed toward us. However, Dr. Rask, Jensen, and Hans Neilsen hurried out to greet us. To the natives we were no longer strangers and hence did not deserve any special recognition. No one untouched by "hardship" can appreciate as we did the exquisite luxury of a smelly, overcrowded hut, a hunk of matak, an ax with which to hew it, and limp, utter relaxation.

The next day I awoke refreshed, headache and depression gone. However strenuous the previous day, as a rule the morning found me eager to continue, and now that I was on the homeward stretch I felt more than ever keen. We set out promptly after an early, silent breakfast. Gripping the uprights to guide the sledge, I hurried the dogs along behind Andreus' rapid lead trot as he bobbed in and out among hummocks and ridges; Knud's team brought up the rear. Presently we reached wind-swept open ice where hard-packed snow encouraged the dogs to race, swinging wide around hills, or banking over them if not too steep. Some-

times we stopped to look back at the trail of several hours winding over and among the hills in great curves. But we never stopped long. From lengthy days behind the sledge I had fallen under the spell of the trail. There is a subtle magic about this mystery of white wastes, a swooping freedom kin to that of birds in space.

One stop of an hour was made at Kigtorsak, a small winter colony, whose director was a combination of dictator and sage. He was an old man among Eskimos; but his watery eyes were penetrating, and with the help of a cane fashioned from a willow he was as spry as a man of twenty. He claimed that ice hereabouts became poor when the Panama Canal was opened and joined the two oceans. The director was righteously indignant. Two years earlier he had gone so far as to draw up a petition to have the Canal closed. (The petition got as far as Godhavn before being shelved.) Fortunately for me, an American, he did not know the exact location of the Canal, believing it to be in Denmark, and I was able to enjoy his unstinted hospitality. He entertained me in his home with seal meat and coffee and the conversation of his friends. On the wall of his hut was a picture of a child standing on the shore of a pond watching a duck. The director wanted to know why Danish parents were allowed to bring up their children so idly? Why wasn't the child taught to shoot the duck-a plump bird, too?

At noon we halted for a pot of tea brewed on our primus stove, around which we crouched with parka hoods thrown back because the weather was fine. Then off again behind the tireless dogs, which dashed so fast across the icy wastes I could hardly keep up with them.

For the second time we passed the opening of Giesecke's Fjord, and I stopped to examine two of its arms. Along the route it was necessary to make corrections on my map, for descriptions of particular features and the charts were often in error. Accurate measurements were made difficult by inaccessible approaches.

Evening brought unforgettable drama of vast ice bulks losing themselves in softening shadows, a dreamy melting of night with day shadows, the scenes drifting back past us, changing, darkening; nostalgic beauty of perfect theater. Andreus' dog team silhouetted against a hilltop sky line was richly symbolic; its disappearance—he was going on ahead to Iunarssuit—infinitely touching. When I saw smoke picture-still above a welcoming cluster of huts I could have cried aloud for pleasure! Then abrupt chaos of chorused village dogs; voices; a torch flame a pillar of fire advancing through the darkness; the touch of a powerful hand—and the illusion was over. We were in Tasiussak.

Knud and I had covered the seventy miles in fourteen hours. And Andreus was still going!

Jensen was there, having gone ahead when we had detoured to visit a section of Giesecke's Glacier. Dr. Rask had branched off earlier in the day to visit some smaller villages not on our route. For the first time in several evenings I enjoyed a long conversation with Jensen. He told me the story of a hard sledge trip he had made last spring from Pröven to Upernivik. He had traveled by sledge to within four miles of Upernivik and was forced to continue by kayak the remainder of the way. With an Eskimo companion he rode for ten hours in a heavy sea. So rough was the water that to avoid disaster they were obliged to get into their kayaks on the ice, riding them into open water on the crest of a wave. The turbulent waters would not permit them to launch their craft normally; the first wave would have punctured the kayaks against the jagged edge of the sea ice. Near Augpilartok he saw a flock of auks that seemed to follow him all the way in-a phenomenon he could not understand until the next day. He realized then that the sight of the auks had made so deep an impression upon his overstimulated imagination that the picture persisted long after the visual impression was gone. He also told me that when Henson, Peary's negro valet, came ashore, the natives all ran for their

homes: they had never seen a man so black, they protested. March 6th, the following day, I decided should be spent in Tasiussak for much-needed rest. I had been on the trail now since February 25th. The route had not left me exhausted; but I was footsore, and the prospect of leisure was a pleasant one. I was glad too to eat something besides seal meat. Only with the addition of quantities of fat is it at all palatable—the lean meat is flavorless—yet Eskimos seem always to prefer seasoning it instead with sugar, for which they have an insatiable appetite. Being more soluble than fat, sugar is more quickly absorbed and converted to heat: a Greenlander suffering from exposure is customarily revived with several lumps of sugar.

The wife of the local trader asked whether I had heard anything of an airplane over Greenland. On the night of February 6th she had seen a bright light speeding northward across the sky. Some Eskimos traveling south with mail from the Cape York District later brought news of a meteor that struck near Cape York that same night with such violence that houses shook under the impact. Though a search was made the meteor was not located.

Refreshed by my day off, I sledged the twenty miles northeast to Giesecke's Glacier the next morning. The run was a hard one, much of it over bad sea ice, and for the first time in our journeys Knud and I were thoroughly soaked. Because of limited time we had brought no food and had to make the survey on empty stomachs as well.

Giesecke's is a glacier of the first magnitude. Against the cloudless, deep blue sky its shining, hundred-foot cliff is remarkably white, a veritable Jotunnheim fortress wall that hurls back the sun's rays like deflected darts. But this wall, which stretches nearly fifteen miles along the coast, appears not to have been impregnable. In three places it is broken by nunataks, and the whole Ice Giant stronghold has been "reduced" to a mass of scattered bastions, low-rising mounds, rough hummocks, and smooth areas split by great crevasses. Alongside the southernmost bastion runs a glacial stream emptying into a deep snow-filled pit like a ruined moat. The bastion itself terminates in a moraine, a heap of fragments seemingly eloquent of violent battery against the wall, actually the deposits of the ice river's pilgrimage to the sea.

Approaching by the more moderate slopes, we were able to reach the moraine, for me always one of the most interesting features of a glacier. Here lay pieces of gneiss, red granite, and basalt scraped up in the glacier's progress, in which could be read a geologist's guide of what lay underneath the inland ice. About a mile from the southern land margin two nunataks rise at least one thousand feet above the surface of the ice. They are separated by a narrow strip of ice that looks like a hanging glacier, whose source is, of course, the inland ice east of the nunataks.

During the winter Dr. Porsild had written me at length regarding Giesecke's Glacier. Powerful currents, apparently produced by high tides, swept the glacier front, undermining it so rapidly that, when a section broke off, it was immediately carried away. As the glacier receded, a great basin of open water was left at the fjord's head. To it the natives have given the name Tasingortok (That-Which-Becomes-a-Lake), and here they come to hunt seals. That the spot is a favored one is evident from the fact that Knud and I counted twenty-eight basking seals on ice floes in the bay. Yet the basin as a whole is exceptionally free of bergs and growlers; now that the glacier has receded, it is only slightly more productive than torpid Cornell Glacier. The Danish explorer Ryder on his visit in 1886 reported the fjord choked with icebergs to a distance of more than seven kilometers—a statement which seems not to have taken into account periodic crowding of ice in the sea near Saitok, but which does suggest how extensive the change has been.

It was dark when Knud and I headed back toward Tasiussak. Driving was arduous over the treacherous, half-seen ice, and both of us had our share of wettings, but I believe that food was the sole

preoccupation of both before we had covered half the twenty miles to the village. Presently a blizzard overtook and chased us home, which we managed to reach shortly before the storm broke in fury.

Early morning saw us plowing through snowdrifts to join Andreus in Iunarssuit, where he had, we supposed, been enjoying two days of unbroken revelry. We stomped into Vali's hut and found the household sorrowing. A word told the story. Vali's infant son, Ewa's half-brother, was dead. According to the mourning mother, her child had caught severe cold the day our party left for the north, and had died within twenty-four hours afterwards. I had to force myself to meet her glance. It is only too likely that I or Dr. Rask or Jensen had carried the bacilli that robbed her of her youngest. The family displayed no awareness of this probability and treated me with their customary friendliness, but neither this nor realization that we had neglected no reasonable precaution could prevent a feeling of heaviness at the deep justification for Eskimo fatalism-disease, poverty, perils of bad ice, hidden currents, waves, bergs, seaward driving foehns, hunger, cold!

When we moved outdoors to cook seal meat for our lunch, the villagers showed surprising interest in our primus stove. Several times I had to pump pressure into it and release it to explain its operation. However, I was a total failure at explaining the necessity for heating the burner to create gas out of the liquid kerosene.

I had become fond of Knud, and saying goodbye to him was difficult. Our handshake spoke eloquently our feeling toward each other. "Inudluarna!" (A good trip!) That was all.

Andreus set the dogs in motion toward Upernivik, only forty miles distant now. A heavy gale was blowing diagonally across our trail. Our course took us due south in the beginning, but the blowing wind diverted us toward the east. So long as we could follow old tracks, we were safe; but now and then we had to seek



KNUD

new routes because of bad ice; then reliable Andreus seemed fairly to divine the exact location of a well trodden route.

The dogs strained eagerly at the sledge as they entered familiar territory. During the afternoon the gale moderated to a brisk westerly wind, though the sun remained in hiding. At every open stretch the team raced over the snow and dashed down hills with breakneck speed, reluctant to obey the driver's cautioning shouts, impatient for food and rest awaiting in Upernivik. Andreus and I controlled our joy as well as we could.

The wind rolled dusky, low-hanging clouds over against the mountains bordering the inland ice. Rents in the dense stratum revealed a series of Arctic pictures—jagged snow-laden mountains, saw-tooth peaks bold against a dull sky, glaciers blue-white and infinitely remote. Night had come when we made the last detour around broken sea ice and entered Upernivik.

Chapter 27

LAST DAYS

I SLEPT late into the morning, luxuriating in the first real bed I had occupied in months. When was it I had last enjoyed such comfort? It would not be long—my mind almost flinched from the leap ahead—it would not be long before I was starting back to regions where luxury was taken for granted, where soft beds and variety of food and weightless clothing and conversation were subjects one could safely allow oneself to think upon. Why, even here in Upernivik...

Perversely, the stretch of days ahead seemed suddenly to lengthen, departure south became more remote than when merely a small candle flame cherished in the brain against Greenland's cold and hugeness.

I got up, and with mingled feelings assumed civilian garb to the extent of a clean white shirt, coat, and choking necktie. The addition of sealskin trousers and *kamiks* made my appearance that of a local Dane, except for my Eskimo-length hair. I had not the Dane's accustomed patience, however. I was beginning to fret, and hastened to place myself in the company of others.

The sight of luncheon cheered me. Eating white man's fare was an exciting experience. Fruit soup, fried meat, white bread, butter, canned asparagus and coffee with cream—ecstasy! But I was hungry for news, too, and morbidly hungry for companionship beyond what Eskimos could offer. For long months I had been living their life, eating their matak and seal meat, cramped in a hut, using their boats and dog sledges; as thoroughly cut off

from the twentieth century as they. I had come near to doubting the real existence of anything pleasanter.

"It has not been a pleasant winter," the Bestyrer was saying. "The natives are all hearing quivituts."

"Why this year?" I asked.

"Perhaps you do not know about Professor Wegener. Some years ago when he wintered in Greenland he made a trip to their station on the inland ice. He had an Eskimo companion, Rasmus, with whom he started back for the coast. Professor Wegener died on the trip."

"How do you know? Was his body ever found?"

"Yes, he was found dead in his sleeping bag."

"What about the Eskimo?"

"That's where the *quivitut* comes in. Rasmus never returned. Now we get periodic reports of strange sounds coming out of the mountains—like a man blowing down the barrel of a gun, they say. It's supposed to be Rasmus."

The Bestyrer continued, "By the way, have you heard that we will have an inspection this year?"

"I thought that was an annual event," I said.

"This is to be extra special. Parliament is sending a delegation. I will have to build some kind of a memorial near the harbor to commemorate the occasion. The newspapermen who will come too will like that," he concluded.

The good Bestyrer did much to satisfy my hunger for news and companionship. Yet when I left the house and was confronted by the eternal inland ice, I grew tense once more, and swore that I never wanted to see it again so long as I lived! As in depressed moments after a day's exhausting sledging I longed for sunny, hospitable climates where comfort is held a necessity.

Then, my round of visits, in which I renewed acquaintanceship with Saugmann, the Rasks, and Jensens, chatting lightly of everything and nothing, began to buoy me up. I ceased resenting other persons' casual acceptance of Greenland's bare tolerance. This was not such a bad life after all. Were Greenland kinder, its people would not have received me with such eager kindness, everywhere.

Day followed day in amiable idleness. Irresponsibility and rest worked their subtle changes in my mind; the memory of hardship faded, and I began to see, like a man recovering his sight, the beauty of the scenes around me. I even caught myself muttering, "This you will miss," "That you will remember always," "Such beauty you will never again behold." The inland ice itself renewed its spell.

At the same time my restlessness returned more strongly than ever. Now that the purpose of my 'vacation' was accomplished, I wished to get away; there was no point in dallying; my job was done. Conversation with the Danes began to seem inane chitter-chatter, and I could have sworn that every anecdote was a rehash of others I had just heard repeated. Overlong isolation, excessive independence on Natsiorsiorfik and on the trail, made me socially intolerant. I even offended the good Bestyrer, in my impatience with 'unbusinesslike' methods, by requesting an itemized account of our transactions. The request was unheard of: he could assume only that I questioned his honesty!

I brooded over this during sleepless nights—coffee inevitable at every meal and visit combined with inactivity to keep me awake—and vowed that never again would I be guilty of smugness and inconsideration. I would ask forgiveness at the first opportunity for the monstrous wrongs inflicted! In a dim way I appreciated how radical a change Greenland had made in me. The transition from the restrictions of life at home, where I was a gear meshing with other gears and spinning on a fixed axis, to the utter freedom of our island, where with Max I was absolute king having only our Eskimo family to consider, had been too gradual to arouse thought. Yet nowhere in the world was life more untrammeled than that we had been leading on Natsiorsiorfik. Lords of every-

thing we surveyed, the endless prospect merely magnified our importance. The inland ice, the glaciers and fjords, the hills dark against the expanse of white, the garden of snowdrifts and blossoming rhododendrons bordering brooklets of clear cool crystal, later the infinity of mere snow and ice and jeweled sky, seemed ours, a universe all our own; for who was there to dispute possession? Among others again, I found that I had lost the spirit of give and take, as though I were in fact a hermit savage. It would be long before I was adjusted again to the restrictions of civilized existence. Patience, a virtue in the citizen, seemed to demand of me fantastic concessions. Yes, time and effort were needed. I was fortunate that unlimited independence had not done me serious harm.

It was a relief, after satiating weeks of rest in which the days barely crawled by, to abandon Upernivik, its dullness, its restraints, reluctant though I was to part with the Rasks, Jensens, Saugmann, and the Bestyrer at the last, and they with me. I nursed the illusion that home lay just over the top of the nearest mountain. Why delay? I found myself homesick too for Natsionsiorfik and Max, and while they lay in a quite contrary direction, fancied myself already nearer Michigan when finally Andreus started the team and the Favell's grew faint behind us.

Andreus had spent the time during my stay in Upernivik visiting his ubiquitous relatives in Kangek on the south shore of Kaersorssuak Island. He had returned several days previously, arriving in a driving blizzard that swept down from the inland ice. The storm had raged for days, blocking the trails. So great was the force of the wind that the ice in the sea was rapidly broken up, and great lanes of open water appeared. With the break-up of the ice, spring was on the way.

He seemed glad to be on the trail with me. I should miss Andreus, miss him a great deal. His honesty, sincerity, coolness in the face of danger, thoughtfulness for our comfort and welfare, and generous help in attaining our objectives had roused my respect, then deep liking. Except for his carelessness in not returning promptly to Augpilartok, so that he was given up for dead, I had nothing with which to reproach him—for how much had I to be grateful to him! Andreus also would regret our going, I knew, and Susan not less; Ewa as well would miss us. Max and I had been fixtures in their lives, patrons, and finally friends, though they had more to give Max and me, strangers in this land, than we could give them. Yet it would be better for them when we were gone.

Contact with the outside world has been of doubtful advantage even to the Andreus Petersens. Civilization has not made Andreus an independent citizen: he would have been that in any case. Fortunately, he is a man of too strong character to be demoralized as so many Eskimos have been. The introduction of an unassimilable culture has deprived these of more than they have gained, creating a chaotic, mongrel existence featured by loss of selfreliance and of self-sufficiency. Seasonal or permanent government employment and the attraction of larger villages draw them from the hunt. Stoves replace blubber lamps; cloth, furs; feather beds are substituted for skins; and though twine for nets, wood for boats, and iron and steel for sledges are sold at cost, and coffee, tea, sugar, and cigarettes are heavily taxed to discourage their use, debt and idleness too frequently replace hardy initiative and the independence it produces. Even the wise Danish administration cannot reverse the effects of civilization.

As I fell into the familiar pace behind Andreus my thoughts became less troubled. Finally, under the soothing yet exhilarating rhythm of the trail I ceased to think altogether. It was enough to be kiting across the ice, pressing ever forward, delighted by the effect of progress. The team's keenness was matched in every fiber of my being. The air was crisp, and the snow, and mountain ridges with precipitous slopes glowering at us, a true picture as we

are whipped toward home. "Asût!" said Andreus. I grinned at him. He was thinking of Ewa and Susan. "Asût!" I called back. The sledge quickened its rush over the snow, but the island was still a long way ahead.

APPENDIX

History

Southern Greenland has been known to the European world for more than a thousand years, though its existence was forgotten from the fifteenth to the eighteenth century. Although Gunnbjörn Ulvsson probably sighted Greenland in the year 974, it was not until 982 that Eric the Red sailed past Cape Farewell and then northward along the west coast and into the interior of a large fjord where he built his home, Brattahlid.

After a sojourn of three years in Greenland, Eric returned to Iceland with the idea of promoting colonization in the new country. To achieve this objective, like a real estate promoter, he gave the country an attractive name—Greenland. He had much to sell, however, for his persuasive accounts of the deep fjords, rich pastures, excellent hunting and fishing were tempting to his adventurous listeners. Eric met with instant success, and in 985 with a flotilla of twenty-five ships he started for Greenland. Of this group only fourteen ever reached their destination; some returned to Iceland and the remainder were probably lost at sea. Estimates of the number who reached Greenland that year vary from two to three hundred men, women, and children.

The early colonists settled in two areas which were known as Österbygden (Eastern Settlement) and Vesterbygden (Western Settlement) farther north. Both settlements are in the great fjord region of southwest Greenland. Despite the inhospitality of the country they made a living by cattle raising, hunting, and fishing; and, moreover, their sagas are evidence of continued literary interests. Certain it is, from recent excavations, the colonists achieved a considerable degree of comfort and maintained a high standard

of culture. In one locality there have been found the ruins of a banquet hall that could have accommodated a hundred people. The total population of this European colony in an Arctic country has been estimated at from three to ten thousand people.

In 999 Leif, son of Eric, made a voyage to Norway where he came under the influence of the King who induced him to accept Christianity and urged him to introduce it in Greenland. Leif persuaded his mother, Thjodhild, to become a Christian, where-upon about 1000 she built a church at Brattahlid. It seems entirely possible that by the time of Leif's death in 1021 the country had been entirely Christianized. From 1152, when the episcopal see of Greenland at Gardar was made subordinate to the Archbishops of Trondhjem, the church life of Greenland flourished.

The next important turning point in Greenland history came in 1261, when the colonists submitted to the rule of the Norwegian king Haakon. This entailed the payment of taxes to a distant ruler, a measure that was passed voluntarily by the local legislative body. The whole of Greenland trade was monopolized by the King's representatives. Communication with Norway was regular and frequent while the trade monopoly was enforced in the fourteenth century. During the fifteenth century, because of political changes in Norway and the decimation of Norway's population from the Black Death, intercourse between Greenland and Norway was discontinued. It is even recorded in 1484 that German merchants in Norway killed all who were acquainted with the route to Greenland. The last contact between Norse settlers in Greenland and the mother country was about 1411.

Historians have postulated several theories to account for the disappearance of the Norse colonies in Greenland. According to one group of scientists the colonists were killed off by warlike Eskimos who either came down the west coast from the north or advanced northward after rounding Cape Farewell from the south. Others believe that the settlers were assimilated through

marriage by the more numerous and hardy Eskimos. Still another theory emphasizes climatic changes. The true answer would probably take into account a combination of circumstances including the breakdown of communication with Europe.

The modern history of Greenland begins in 1721 with the landing of the Norwegian missionary, Hans Egede, a short distance north of the mouth of Godthaab Fjord. For thirteen years prior to his successful voyage the clergyman had urged the establishment of a Greenland mission. He finally went as the representative of a commercial company which he had organized with the help of several merchants.

It is hardly possible to exaggerate Hans Egede's contribution to the existence of Greenland. He lived there for fifteen years, during which he worked indefatigably as a missionary, leader, colonizer, and explorer. He was successful in locating the sites of the earlier colonies and died believing there were descendants of the old Norsemen living in Greenland. The hardships and privations attending life in Greenland were not his only handicaps. Trade was poor, and he met with considerable hostility from official quarters. In 1726 the "Bergenske Kompagni" which had sponsored him was forced to suspend operations; but the King came to his assistance. But in 1734 the King issued a charter by which the trade in Greenland was given to Jacob Severin for a period of six years, and again missionary and colonizing work became a private enterprise with headquarters in Copenhagen. Severin's trade monopoly lasted until 1750, a period fraught with adversity and disappointments. The newly organized General Trading Company assumed responsibility for the Greenland traffic in the same year. The trade was taken over entirely by the state as a monopoly in 1774. Since that time, without interruption, Greenland trade has been carried on by the Royal Greenland Trading Company as a government monopoly. The instructions regulating this trade, especially with reference to the humane provisions for

care of the natives, stand even today as memorials of wise colonial administration.

Despite the many excellent features of the provisions pertaining to trade, the total effect was to support the authority of Europeans. The natives were declining in numbers, becoming poor, and were losing initiative and enterprise. No one was more conscious of this than that great friend of the natives, Dr. H. J. Rink, who prior to 1868 had spent sixteen winters and twenty-one summers in Greenland in various capacities.

The directorship of Rink marked another era in the history of Greenland. Through his initative legal order based upon the natives' customs and regulations was introduced into the Greenland community. He made great progress in carrying out his plans to enlighten the natives, develop their country, and stabilize their economic life. The post-Rink administration, by contrast, was characterized by lack of progress and, in some cases, sabotaging of reforms initiated by Rink.

Through the years there had been much agitation for separation of trade and administration in Greenland. This was finally accomplished by the Act of 1908 in an organization that lasted for only four years. The separation of trade and administration which had resulted in the appointment of an administrative director and an independent commercial director was abandoned; under the new management the commercial director was subordinate to the administrative director, acting largely in an advisory capacity with no authority regarding trading operations. This arrangement has remained substantially the same to this day.

In Denmark the administration is centered in the Grönland Styrelse, which is a special department of the Ministry of the Interior. Responsible to the Minister is a Director for the Administration of Greenland, and under the latter are the officials in Greenland. All affairs relating to the colony are subject to this department; the church and schools, however, are also held

accountable to the Ministry for Ecclesiastical and Educational affairs. Responsible to the director is a manager of the trade department, who arranges for the sale of products from Greenland and the purchase of commodities to be sent there.

Greenland is divided into three provinces. South Greenland from Cape Farewell to North Ström Fjord; North Greenland from North Ström Fjord to Northeast Foreland and all of East Greenland. For ecclesiastical purposes the country is divided into parishes, while for administrative efficiency each province is divided into counties, districts, and municipalities.

In North and South Greenland the highest official is the Landsfoged, or Chief Administrator, who in addition to being an administrator and judge supervises the affairs of trade, public health, and the work of lesser officials. Directly under the Landsfoged are the Sysselmaend, or county deputies, who are chairmen of the district councils and county administrators of justice.

The highest local authority in all educational and ecclesiastical matters is an archdeacon who makes his home in South Greenland. He is also the head of the Greenland clergy and acts as a liaison officer in all ecclesiastical matters between the Greenland church and the authorities in Denmark. His responsibilities are shared by a deputy and deacon in North Greenland.

East Greenland, consisting of the colonies at Angmagssalik and Scoresby Sound, and the Cape York District in northwest Greenland are administered by the Director personally according to regulations of the Ministry of the Interior.

Trade Today

For the last one hundred and fifty years trade, which was originally referred to as a monopoly, has been conducted by the government. The present trading arrangement, however, would better be described as a cooperative movement. In the early days trading in Greenland was carried on by a system of barter. Now a

currency negotiable only in Greenland but with the same values as that of Denmark is used. Employing it as the medium of exchange, the trading company purchases from the natives whatever products they have to sell.

The commodities that can be purchased at trading posts are about what you would expect to find in a crossroads store. They consist largely of such staples as bread, tea, coffee, flour, and sugar. Woolens and dry goods, hardware, guns and shooting necessities, building materials, coal, and kerosene will be found in most stores. Alcohol is not sold, but tobacco of a cheap quality can be procured.

The prices charged natives for imported commodities and the prices which they, in turn, receive for their products do not seem to follow any accepted principle. Market prices are disregarded, but rates are adjusted to one another so that purchases will approximately equal sales. Accounts frequently show a deficit and are subsidized by the State. A distinction is made between commodities considered necessities and those that are luxuries, the former often being sold at a loss.

It should be pointed out that although the native products are purchased by the trading company without respect to their market value, the Danish government has not been guilty of exploiting the natives. It has been the aim of the Danes to protect them from the unfortunate consequences of civilization—an aim that has been realized to a remarkable degree. Although the natives have not enjoyed any of the advantages of free trade, neither have they been exposed to ruthless exploitation.

Formerly the products sold to the trading company consisted largely of blubber from seals, whales, and walrus, fox and bear pelts, and eider down. The protection of eider ducks has created some local adjustments in economy, but the decline in sealing, which was the chief industry formerly, has had more serious repercussions. It must be remembered that the seal was the staff of life, supplying skin for clothes, oil for heat, meat for food, and

blubber to be sold for money needed to purchase the necessities of life. Fortunately, the appearance of an abundance of fish has provided the population with a new means of livelihood.

Fishing is carried on largely from kayaks and umiaks. Even this has been revolutionized by the use of modern fishing boats and fishing tackle. Groups of natives have banded to purchase Diesel-powered motorboats that can venture far to sea. The fish are brought to land and sold to the trading company. A not inconsiderable halibut canning industry has grown in Holsteinsborg, where from fifty to one hundred men and women are employed.

In South Greenland a sheep farming project that will provide subsidiary occupation for fishermen has been successful. Other farming has also been conducted with satisfactory results.

Geography and Geology

Geographically Greenland extends from Cape Farewell, the southern tip in latitude 59° 46′ N. to Cape Morris Jessup, latitude 83° 39′ N., a stretch of more than 1,400 miles. In its broadest part the island is somewhat over 600 miles wide. The assumption that Greenland is a far Arctic country is only partially correct, for its southernmost point is farther south than Oslo, Helsinki, Bergen, and Leningrad. At the same time it should be remembered that the northern extremity lies nearer the north pole than any other land mass.

Except for a narrow ribbon varying in width from about 100 miles to nothing at all, Greenland is buried under ice. The great glacier, known as the inland ice, covering approximately 700,000 of Greenland's 830,000 square miles, takes the form of a flat dome rising nearly two miles at its highest point. The slopes of this dome are heavily crevassed, but the central plateau is practically a level surface.

This inland ice of Greenland has until recent years for the most part proved too great a barrier for even the most zealous explorer.

In 1860, Hayes advanced a short distance over the great ice dome until driven back by a storm which nearly brought tragedy to his party. A. E. Nordenskjöld in 1883 penetrated the interior from the middle of the west coast, and Peary three years later traveled nearly 125 miles up onto the inland ice in the same region. In the autumn of 1888 Nansen actually crossed the southern ice dome. Admiral Peary crossed northern Greenland in 1892 and again in 1895; the Swiss explorer Dr. de Quervain and the Danish explorers Colonel J. P. Koch and Dr. Knud Rasmussen all crossed Greenland on wide sections in the years 1912–13. During the last decade and a half the icecap has seen greatly increased activity, especially by Germans and British.

From a geological point of view, Greenland must be said to form part of the large Canadian massive; all other formations occupy a comparatively limited area. The west coast of Greenland consists of schists, gneisses, granites, and crystalline limestones of pre-Cambrian age, with two areas of extrusive and sedimentary rocks in isolated basins. Numerous minerals and ores, including asbestos, mica, cryolite, coal, graphite, copper, iron, silver, and gold, are known from Greenland. Only two, however, cryolite and coal, are of commercial importance. Graphite of slight value is widely disseminated in old crystallines. Cryolite alone is exported in quantity. Generally speaking, there seems to be no reason to believe that minerals of greater value than those already known will be found. Precious and semiprecious stones that have been discovered are of inferior quality.

With the available data gathered by explorers at the disposal of the scientist, he can now answer with a certain definiteness questions about the inland ice. A profile will show the greatest elevations reaching to more than 11,000 feet along the eastern border. Hitherto little was known about the thickness of the ice, estimates varying from 2,000 feet to two miles. Recent data gathered by Germans indicate considerable irregularity of the rock floor

though a saucer form seems to prevail. At an elevation of slightly less than 10,000 feet the rock floor was found to be about 1,000 to 1,500 feet above sea level, indicating a thickness of more than 8,000 feet.

Is the Greenland ice sheet a relic of the last glacial period, or is the present snowfall on it sufficient to prevent melting and evaporation from reducing it from year to year? De Quervain ascertained the accumulation of ice to be greater than the observed dissipation, which seems to indicate that the glacier has fully maintained itself in its present extent. As for coastal glaciers, he writes that in 1912 the fronts seemed to be generally receding.

Conflicting reports from natives indicate that in some places the ice has had a different distribution from the one it has now. One explorer who has gathered evidence of the oscillations of the ice front from various sources writes of a South Greenland glacier that had advanced so rapidly that within the memory of living men it has buried a group of Norse ruins. According to other reports, the ice is retreating.

Aviation Possibilities

The flight of Colonel Lindbergh across the Atlantic in 1927 marked the beginning of a new era in the history of transportation. Heretofore, despite the important part played by the plane in World War I, travel by air had been limited substantially to continental flights. When it was demonstrated by Colonel Lindbergh that transoceanic hops were possible, public interest in aviation crystallized practically overnight. For this situation there was a striking parallel. In much the same way the eyes of the world in 1492 had been turned on a new route across the seas, and the result of that one bold voyage into the unknown needs no repetition. Naturally, following Lindbergh's flight interest turned to the availability of Greenland as a stopping-off point on the northern route to Europe. The icecap was referred to as the greatest natural

landing field in the world, and consequently exploration of it took on new interest.

Since exploration by airplane became a generally recognized method in the polar regions, the icecap has lost much of its dread for travelers. In 1928 Bert Hassell and Parker Cramer flew in a monoplane ten miles within the western border of the inland ice of Greenland, where they were forced to land by a shortage of gasoline. The year 1931 was marked by an extended use of airplane exploration in Greenland. Members of the British Arctic Air Route Expedition flew two planes in a series of seventy-four reconnaissance and survey flights during every month of the year, and without a single serious mishap. In August, 1931, Parker Cramer completed the first flight over the icecap from west to east, and later von Gronau flew in the opposite direction. In 1933 Colonel and Mrs. Lindbergh flew over Greenland on several routes.

Only a few flyers have landed on the icecap, so that the practicability of using the ice plateau as a landing field remains a moot question. Landings, even with heavy planes, could be effected with safety, as was shown by Hassell and Cramer. Leaving the surface would be much more difficult because of high altitude. The periphery of the inland ice for a distance of forty miles is too crevassed for either landing or starting purposes. It is possible, of course, that a plane could taxi from the high interior to the crevassed area for the take-off.

The problem of transporting fuel to the icecap adds further complications which make it almost imperative to find other landing facilities. Alluvial plains near the heads of large fjords could be used for land planes; and for flying boats the well protected fjords are excellent. Floating ice in fjords has proved to be a hazard on the east coast, but it can be obviated by the use of some large lakes.

Any probability of Greenland as an air base must take into

consideration the important element: weather. Climatic data available from Greenland are not only scattered, but also local in character. They are not often representative of general conditions. Human comfort and safety frequently determine the location of observing stations. Moreover, the smaller stations are generally maintained by untrained natives, and within the fjords, where the wind directions reported have no significance with respect to larger areas. The data are, however, now widely used, and often lead to false conclusions.

These difficulties are somewhat offset by records gathered by a recent epidemic of expeditions and through the excellent data gathered in some of the larger colonies. The Danish government has established, at six widely separated places upon the coast, weather stations provided with radio equipment, so that from these locations the local meteorological reports are each day announced to the world.

Meteorological elements are extremely variable in Greenland, considerable departures from the mean values not being uncommon. Precipitation, which is important in flying, decreases from south towards north with the distance from the warm and moist air masses of the Atlantic. In the latitude of Upernivik, for instance, the measured moisture is as small as that within most continental areas. Everywhere the number of foggy days shows the same yearly variation: much fog in summer, little fog in winter. Again, however, the summer fog area can easily be avoided by traveling farther north.

The intense cold of the interior is largely responsible for the wind circulation and havoc-making storms that issue from its margin. The mechanism by which the polar refrigerator of Greenland operates is known as the "glacial anticyclone." Coordinated observations in Canada, Greenland, and Iceland should make it possible to predict hurricanes over Greenland as well as provide forecasts of Atlantic storms.

Experience of the last two decades supplies the answer to the question; Is flying over Greenland feasible: The reply is definitely in the affirmative.

ACKNOWLEDGMENTS

It was for the purpose of furthering scientific studies in Greenland that the University of Michigan sent five expeditions to that Arctic country. Their studies added to the geological, glacialogical, and meteorogical work already done and initiated with pilot balloons aërological studies of several regions. The writer spent somewhat more than two years in Greenland as a member of the expeditions. The activities of the last party, around which this narrative is told, were directed by Professor William H. Hobbs by means of radio communication—while it lasted. The writer, assisted by Mr. Max Demorest, a student from the University of Michigan, carried on the work in the field. The purely scientific results are published elsewhere.

The expedition was financed by the Carnegie Institute of Washington, the American-Scandinavian Foundation, in which the author held the Henry Goddard Leach fellowship, and Mr. H. Demorest of Flint, Michigan. Without their generous support this book would not have been possible. For the scientific work we were supplied by the United States Weather Bureau with most of the necessary equipment. Special thanks are due Mr. O. S. Finnie, director of the Northwest territories, for passage on the S.S. Beothic; to the Honorable Daugaard-Jensen, director of Greenland Affairs, who promptly supplied the necessary permits; to all the Royal Danish Trading Company officials and employees with whom we came in contact; and to the University of Michigan for instruments.

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GLOSSARY

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ajungilak—good
akigssagangilanga—I have nothing to pay with
amalo-more
angakoq-conjuror
angutelerak—motorboat (man-moved-propeller-tail)
anorak-shirt blouse
arfangniag-whaler
aso-slow down
asút-more speed
ayeh-ayeh-stop (when driving dogs)
ersorsisigssaksiiorpigssaringnersiorsinangerkâkantime-âsît-a stone used
  for tanning kamik skins
favell-goodbye
iarpok-bad
il-il-il-turn right (to dogs)
imaka—perhaps
inudluarna-a good trip
itlitli—the same to you
iu-iu-iu-iu-turn left (to dogs)
ivdludlo—the same to you
kâ! kâ!-hurry
kalsorsaufak-doctor (man-who-tries-to-cure-sick-person)
kamik-skin boot
kamikssuak-large skin boot
kanok-i-pit?—how are you?
kayak—skin boat
kujonok-thanks
mamapok-delicious
matak-hide of whale
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nakartorpoq—one happened to fall down
nakosak—doctor (man-who-might-cure-sick-person)
nalususuak-know nothing
nanuk-bear
naturimet kiserto kasa nolik-spitting on the floor is prohibited
niakordlugpok-headache
niviarsiak—young woman
nukagpiaq naviaga—a young man finds it dangerous
nunatak-island surrounded by ice
piluk—detestable
pinakoq-beautiful
pinivfarigpoq-beautiful
pivdle—mad
pryontelerak—motorboat (smelly-smoke-propelled-boat)
puisse—seal
puisse nami-no seal
quavdlunaq-white man
quavsinik?—how many times?
quivitut-man who went into the mountains
sabat-Sunday
savssat—herd of whale at opening in ice
sermeq-glacier
sila pinaka—good day
s-s-s-sik-start (for dogs)
tatamigpoq-frightened to death
tikipoq-has arrived
timiak-fur parka
umanak-heart-shaped mountain
umiak—woman's boat
umiarssuak-ship
umiarsuk—small wooden boat
umiatsiak-large wooden boat
utok—basking seal
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More Light On Arctic Regions

GREENLAND LIES NORTH, by William S. Carlson (304 pages; the

Macmilian company, New York).

ULITIMA THULE: PURTHER MYSTERIES OF THE ARCTIC, by Villijalmur Stefansson (383 pages; Macmilian).

REENLAND is a country of hospitable people but forbidding terrain, William S. Carlson learned by bitter experience in his months as a scientific observer there. His report should comfort those who talk of the island's perennial ice cap as a potential stepping stone for trans-Atlantic hombers.

The ice cap is there, Mr. Carlson agrees; and its level surface makes a fine landing field. Several explorers have used it. But the matter of waking it a supply base is something else. It is difficult to reach the cap with sled and dog feam; to transport any quantity of gasoline, sit and food to it from the coast appears to be impossible.

Mr. Carlson describes vividly the perils of that treacherous coast. He learned much about the everyday life of the Eskimos—their dress, manners, language and customs; shout the hunt, on which they depend for food and clothing; about the Danish officialdom, now cut off from the German-occupied homeland and under the protection of the British. He has passed it all on to his readers in a readable book.



WILLIAM S. CARLSON.

William S. Carlson, author of "Greenland Lies North," is an educator and explorer from Michigan, He now is an associate professor of education in the University of Minnesota, "of draft age, married" and the father of a 3-month-old daughter. He worked in iron ore mines to finance his education and thereby acclimated himself for his later work in the Arctic as he was assigned to coldest and draftiest parts of the mine. He first went to Greenland with the expeditions of Prof. William Herbert Hobbs and returned there on the Henry Goddard Leach fellowship of the American-Scandinavian foundation.

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